ORDER NO. APD-8104-570

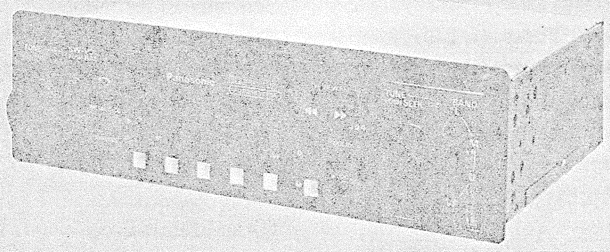
Service Manual

AUTO PRODUCTS

CQ-954EG

CASSETTE CAR STEREO TAPE PLAYER with LW/MW/FM MPX ELECTRONIC TUNER RADIO

AUTO-STEREO-CASSETTENBANDGERÄT mit LW/MW/UKW-MPX ELEKTRONISCHEM



DOLBY SYSTEM ®

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NOTE: For detail of ELECTRONIC TUNER SYSTEM, refer to the technical guide of Models CQ-973EE/EG, CQ-974EG, order No. APD-8102-844.

Panasonic

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SM-CQ954EG 1 ST
SERVICE MANUAL

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka, Japan

SPECIFICATIONS*

Power Supply:	DC 12 V (11 ~ 16 V) Test Voltage 14.4 V, Negative Ground
Power Ouput:	15 W (per channel at 400 Hz, 10% total harmonic distortion with 4 Ω load)
Maximum Power Output:	20 W (per channel at 400 Hz, Volume Control Maximum)
Speaker Impedance:	4 ~ 8 Ω
Current Consumption:	Less than 1.5 A (at 0.5 W)
Car Stereo	
Reproduction System:	4-Track, 2-Program Stereo
Tape Speed:	4.76 cm/sec.
Fast Forward Time:	Less than 100 sec. (C-60)
Rewind Time:	Less than 100 sec. (C-60)
Frequency Response:	31.5 Hz to 14,000 Hz ± 3 dB
Wow/Flutter:	Less than 0.18% (WRMS)
Signal to Noise Ratio:	52 dB (Dolby NR out) 62 dB (Dolby NR in)
FM Stereo Radio	
Frequency Range:	87.5 ~ 104 MHz
Intermediate Frequency:	10.7 MHz
Maximum Sensitivty:	Less than 4 dB/μV, (S/N 10 dB)
MW Radio	
Frequency Range:	531 ~ 1,602 MHz
Intermediate Frequency:	450 kHz
Maximum Sensitivity:	Less than 26 dB/μV (0.5 W)
LW Radio	
Frequency Range:	155 ~ 281 kHz
Intermediate Frequency:	450 kHz
Maximum Sensitivity:	Less than 35 dB/μV (0.5 W)
Clock	
Accuracy:	±30 sec./month
Dimensions	
Radio:	178 (W) x 145 (D) x 50 (H) mm
Power Amplifier:	115 (W) x 100 (D) x 34 (H) mm
Weight	
Radio:	1.7 kg
Power Amplifier	0.6 kg

* Specifications subject to change without notice.
** Weight and Dimensions shown are approximate.
*** C-120 tape is not recommended to use.

FEATURES

- 4-track, 2-program cassette car stereo tape player with LW/MW/FM/FM MPX electronic tuner radio and digital clock.
- Sensitive and selective superheterodyne system with PLL synthesizer.
- Automatic reversing at tape end and Dolby NR circuit.
- Automatic and manual tuning on key board.
- Memory button for 5-preset station, LW/MW/FM.
- 24-hour cystal clock.
- VF (Traffic Information) decoder.
- A.T.C. (Automatic Tone Control).
- A.S.C. (Automatic Separation Control).

TECHNISCHE DATEN*

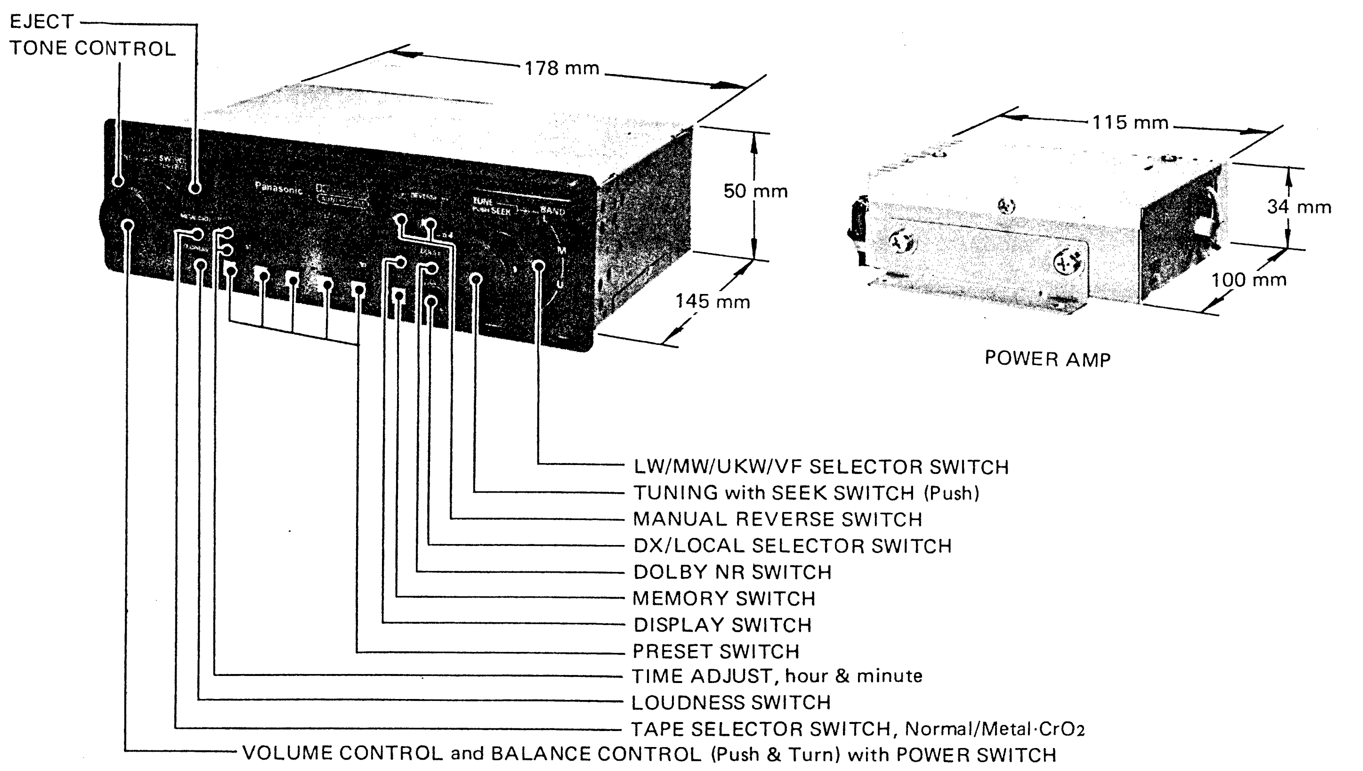
Stromversorgung:	GS 12 V (11 ~ 16 V), Testspannung 14,4 V, negative Batterieklemme an Masse
Sinusleistung:	15 W pro Kanal an 4 Ω (400 Hz, 10% Klirr)
Musikleistung:	20 W pro Kanal an 4 Ω (400 Hz)
Lautsprecherimpedanz:	4 ~ 8 Ω
Stromverbrauch:	Weniger als 1,5 A (bei 0,5 W)
Stereo-Cassettenspieler	
Wiedergabesystem:	Viertelspur-Zweikanal-Stereo
Bandgeschwindigkeit:	4,76 cm/sek.
Schnellvorlaufdauer:	Weniger als 100 sek. (C-60)
Rücklaufdauer:	Weniger als 100 sek. (C-60)
Frequenzgang:	31,5 ~ 14.000 Hz ± 3 dB
Gleichlaufschwankungen:	Weniger als 0,18% (mittelwert, bewertet)
Signal-Rauschbstand:	52 dB (ohne Dolby NR) 62 dB (mit Dolby NR)
UKW-Stereo-Empfangsteil	
Empfangsbereich:	87,5 ~ 104 MHz
Zwischenfrequenz:	10,7 MHz
Empfindlichkeit:	Weniger als 4 dB/μV (Signal-Rauschabstand 10 dB)
MW-Empfangsteil	
Empfangsbereich:	531 ~ 1.602 kHz
Zwischenfrequenz:	450 kHz
Empfindlichkeit:	Weniger als 26 dB/μV (0,5 W)
LW-Empfangsteil	
Empfangsbereich:	155 ~ 281 kHz
Zwischenfrequenz:	450 kHz
Empfindlichkeit:	Weniger als 35 dB/μV (0,5 W)
Zeituhr	
Ganggenauigkeit:	±30 sek./Monat
Abmessungen	
Radio (B x T x H):	178 x 145 x 50 mm
Leistungsverstärker (B x T x H):	115 x 100 x 34 mm
Gewicht	
Radio:	1,7 kg
Leistungsverstärker:	0,6 kg

* Anderungen vorbehalten.
** Gewicht und Abmessungen in annäherunden Werten angegeben.
*** C-120-Cassetten ist nicht zu empfehler.

MERKMALE

- 2-Spur 2-Programm Auto-Stereocassettenband-Abspielgerät mit LW/MW/UKW/UKW MPX elektronischen Tuner-Radio und Digitaluhr.
- Hochempfindlicher Superhet mit PLL-Synthesizer.
- Automatisches Umdrehen am Bandende und Dolby Rauschvernimderungs-system.
- Automatische und manuelle Einstellung auf der Bandende.
- Speichertaste für 5 voreingestellte Sender, LW/MW/UKW.
- 24 Stunde-Kristalluhr.
- VF (verkehrsnachrichten) Dekoder.
- A.T.C. (Automatische Tonsteuerung).
- A.S.C. (Automatische Trennungssteuerung).

DIMENSIONS AND LOCATION OF CONTROLS/ABMESSUNGEN UND BEDIENUNGSLEMENTE


EJECT
TONE CONTROL
178 mm
50 mm
145 mm
115 mm
34 mm
100 mm
POWER AMP
LW/MW/UKW/VF SELECTOR SWITCH
TUNING with SEEK SWITCH (Push)
MANUAL REVERSE SWITCH
DX/LOCAL SELECTOR SWITCH
DOLBY NR SWITCH
MEMORY SWITCH
DISPLAY SWITCH
PRESET SWITCH
TIME ADJUST, hour & minute
LOUDNESS SWITCH
TAPE SELECTOR SWITCH, Normal/Metal·CrO2
VOLUME CONTROL and BALANCE CONTROL (Push & Turn) with POWER SWITCH

INSPECTION OF ELECTRONIC TUNING FUNCTION/UBERPRUFUNG DER ELEKTRONISCHEN TUNERFUNK

- Power Supply Voltage: DC 14.4 V, negative ground
- Speaker Impedance: 4 Ω
- Band Selector Switch: LW
- Loudness, Tape Selector, Dolby NR, DX/LOC: OFF (▮)
- Power Switch: OFF (at starting)

- Stromversorgungspannung: 14.4 V, Erde negativ
- Lautsprecherimpedanz: 4 Ω
- Bandwahlschalter: LW
- Loudness, Bandwahl, Dolby NR, DX/LOC: Aus (▮)
- Stromschalter: Aus (am Anfang)

1. Power Switch, Band Selector & Clock Function

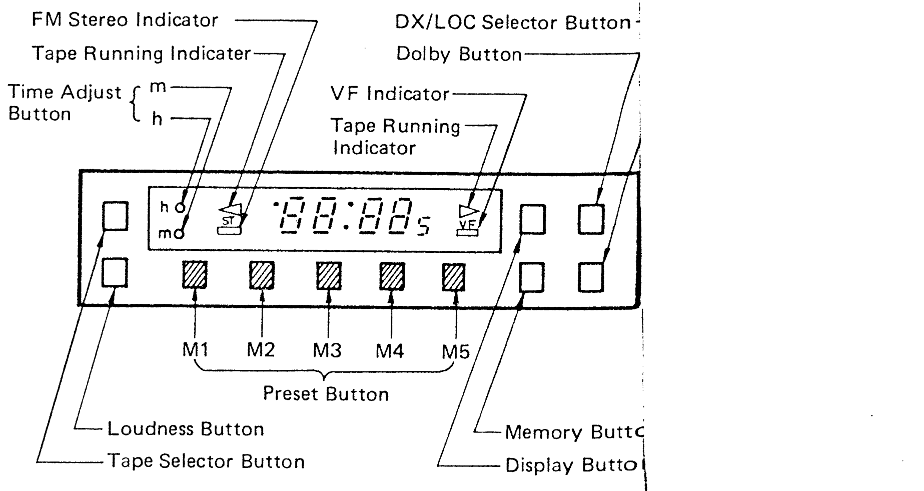
	Procedure Arbeitsgang	Display Anzeige
1	————	No display Keine Anzeige
2	Turn power SW to right (ON). Stromschalter nach rechts drehen (An).	155
3	Set band selector in "MW". Bandwahl auf "MW" stellen.	531
4	Set band selector in "FM". Bandwahl auf "UKW" stellen.	87.5
5	Set band selector in "VF". Bandwahl auf "VF" stellen.	87.5
6	Depress display button (D). Aneigentaste drücken (D).	1:00 Lighted segment winks. beleuchtetes Segment blinkt.
7	Depress a time adjust button (h) (within 0.5 sec). Zeitabstimmtaste (h) drücken (kürzer als 0,5 sec.).	2:00 Second colon winks. Sekundenspalte blinkt.
8	Depress a time adjust button (m) (within 0.5 sec). Zeitabstimmtaste (m) drücken (kürzer als 0,5 sec.).	3:00
9	Depress a time adjust button (h) (over 0.5 sec). Zeitabstimmtaste (h) drücken (länger als 0,5 sec.).	4:00 5:00→23:00, 0:00
10	Depress a time adjust button (m) (within 0.5 sec). Zeitabstimmtaste (m) drücken (kürzer als 0,5 sec.).	2:01
11	Depress a time adjust button (m) (within 0.5 sec). Zeitabstimmtaste (m) drücken (kürzer als 0,5 sec.).	2:02
12	Depress a time adjust button (m) (over 0.5 sec). Zeitabstimmtaste (m) drücken (länger als 0,5 sec.).	2:03 2:04→2:59
13	Depress display button (D). Anzeigentaste drücken (D).	87.5
14	Turn power SW to left (OFF). Stromschalter nach links drehen (Aus).	All display dislights. Alle Anzeigen erlöschen.
15	Turn power SW to right (ON). Stromschalter nach rechts drehen (An).	87.5
16	Depress a time adjust button (h). Zeitabstimmtaste (h) drücken.	87.5 Display does not chnage. Anzeige verändert sich nicht.
17	Depress a time adjust button (m). Zeitabstimmtaste (m) drücken.	87.5 Display does not change. Anzeige verändert sich nicht.
18	Depress display button (D). Aneigentaste drücken (D).	2:01
19	Depress time adjust buttons (h, m) to adjust preset time. Zeitabstimmtasten (h, m) drücken, um die jetzige Zeit einzustellen.	1:00 Present time. Jetzige Zeite.

2. Manual Tuning Function

	Procedure Arbeitsgang	Display Anzeige
1	Set band selector in "LW". Bandwahl auf "LW" stellen.	155
2	Depress each preset buttons (M1 to M5). Jede Voreinstelltaste drücken (M1 bis M5).	155 Display does not change. Anzeige verändert sich nicht.
3	Turn tuning knob to right (within 0.5 sec, manual up). Abstimmknopf nach rechts drehen (kürzer als 0,5 sec., Manueller Hebel nach oben).	164
4		173
5		182 191, 200, 209, 218 (9 kHz-step up) (9 kHz heraufsetzen)
6	Turn tuning knob to left (within 0.5 sec, manual down). Abstimmknopf nach links drehen (kürzer als 0,5 sec., Manuaeller Hebel nach unten).	209
7		200
8		191 182, 173, 164, 155 (9 kHz-step down) (9 kHz heruntersetzen)
9	Set band selector in "MW". Bandwahl auf "MW" stellen.	531
10	Depress each preset buttons (M1 to M5). Jede Voreinstelltaste drücken (M1 bis M5).	531 Display does not chnage. Anzeige verändert sich nicht.
11	Turn tuning knob to right (within 0.5 sec, manual up). Abstimmknopf nach rechts drehen (kürzer als 0,5 sec., Manueller Hebel nach oben).	540
12		549 558, 567, 576, 585 (9 kHz-step up) (9 kHz heraufsetzen)
13	Turn tuning knob to left (within 0.5 sec, manual down). Abstimmknopf nach links drehen (kürzer als 0,5 sec., Manuaeller Hebel nach unten).	576
14		567 558, 567, 576, 585 (9 kHz-step up) (9 kHz heraufsetzen)
15	Set band selector in "FM". Bandwahl auf "UKW" stellen.	87.5
16	Depress each preset buttons (M1 to M5). Jede Voreinstelltaste drücken (M1 bis M5).	87.5 Display does not chnage. Anzeige verändert sich nicht.
17	Turn tuning knob to right (within 0.5 sec, manual up). Abstimmknopf nach rechts drehen (kürzer als 0,5 sec., Manueller Hebel nach oben).	87.5
18		87.6 87.65, 87.7, 87.75, 87.8 (0.05 MHz-step up) (9 kHz heraufsetzen)
19	Turn tuning knob to left (within 0.5 sec, manual down). Abstimmknopf nach links drehen (kürzer als 0,5 sec., Manuaeller Hebel nach unten).	87.7
20		87.7 87.65, 87.6, 87.55, 87.5 (0.05 MHz-step down)

3. Auto-Tuning Function

	Procedure Arbeitsgang	Display Anzeige
1	Set band selector in "LW". Bandwahl auf "LW" stellen.	155
2	Push seek knob. Suchknopf drücken.	164 173→281, 155→ (9 kHz-step up) (9 kHz heraufsetzen)
3	Siganl is received on seeking. Signal wird bei der Suche wahrgenommen.	Signal Freq. Stops and sound is heard. Hält an und Ton wird gehört.
4	Set band selector in "MW". Bandwahl auf "MW" stellen.	531
5	Push seek knob. Suchknopf drücken.	540 549→1602, 531→ (9 kHz-step up) (9 kHz heraufsetzen)
6	Siganl is received on seeking. Signal wird bei der Suche wahrgenommen.	Signal Freq. Stops and sound is heard. Hält an und Ton wird gehört.
7	Set band selector in "FM". Bandwahl auf "UKW" stellen.	87.5
8	Push seek knob. Suchknopf drücken.	87.5 87.6→104.0, 87.5→ (0.05 MHz-step up) (0.05 MHz heruafsetz
9	Siganl is received on seeking. Signal wird bei der Suche wahrgenommen.	Signal Freq. Stops and sound is heard. Hält an und Ton wird gehört.
10	Set band selector in "VF". Bandwahl auf "VF" stellen.	
11	Depress a preset button (M1). Eine Vorwahltaste (M1) drücken.	87.5
12	Push seek knob. Suchknopf drücken.	87.5 87.6→104.0, 87.5→ (0.05 MHz-step up) (0.05 MHz heruafset
13	Signal (w/o SK) is received on seeking. Signal (s/o SK) wird bei der Suche empfangen.	———— Search does not st Suche hört nicht a
14	Signal (w/SK) is received on seeking. Signal (w/SK) wird bei der Suche empangen.	Signal Freq. Stops and sound is heard. Hält an und Ton wird gehört.


FM Stereo Indicator
Tape Running Indicater
Time Adjust Button
m
h
DX/LOC Selector Button
Dolby Button
VF Indicator
Tape Running Indicator
ST
VF
88:88s
M1
M2
M3
M4
M5
Preset Button
Loudness Button
Tape Selector Button
Memory Butt
Display Butto

<DISPLAY AND KEYBOARD>

4. Preset Memory Function, LW

	Procedure Arbeitsgang	Display Anzeige
1	Set band selector in "LW". Bandwahl auf "LW" stellen.	155
2	Set frequency at 164 kHz. Frequenz auf 164 kHz einstellen.	164
3	Depress memory button (M). Speichertaste (M) drücken.	• 164 Memory colon lights. Speicherspalte leuchtet auf
4	Depress a preset button (M1) Eine Vorwahltaste (M1) drücken.	164 Memory colon dislights. Speicherspalte erlöschen.
5	Depress memory button (M). Speichertaste (M) drücken.	• 164 Memory colon lights. Speicherspalte leuchtet auf
6	Depress a preset button (M2). Eine Vorwahltaste (M2) drücken.	164 Memory colon dislights. Speicherspalte erlöschen.
7	Set frequency at 218 kHz. Frequenz auf 218 kHz einstellen.	218
8	Depress memory button (M). Speichertaste (M) drücken.	• 218 Memory colon lights. Speicherspalte leuchtet auf
9	Depress a preset button (M3) Eine Vorwahltaste (M3) drücken.	218 Memory colon dislights. Speicherspalte erlöschen.
10	Set frequency at 263 kHz. Frequenz auf 263 kHz einstellen.	263
11	Depress memory button (M). Speichertaste (M) drücken.	• 263 Memory colon lights. Speicherspalte leuchtet auf
12	Depress a preset button (M4) Eine Vorwahltaste (M4) drücken.	263 Memory colon dislights. Speicherspalte erlöschen.
13	Set frequency at 281 kHz. Frequenz auf 281 kHz einstellen.	281
14	Depress memory button (M). Speichertaste (M) drücken.	• 281 Memory colon lights. Speicherspalte leuchtet auf
15	Depress a preset button (M5). Eine Vorwahltaste (M5) drücken.	281 Memory colon dislights. Speicherspalte erlöschen.
16	Depress a preset button (M2). Eine Vorwahltaste (M2) drücken.	164
17	Depress a preset button (M3) Eine Vorwahltaste (M3) drücken.	218
18	Depress a preset button (M4) Eine Vorwahltaste (M4) drücken.	263
19	Depress a preset button (M5). Eine Vorwahltaste (M5) drücken.	281
20	Depress a preset button (M1) Eine Vorwahltaste (M1) drücken.	164

5. Preset Memory Function, MW

	Procedure Arbeitsgang	Display Anzeige
1	Set band selector in "MW". Bandwahl auf "MW" stellen.	531
2	Set frequency at 603 kHz. Frequenz auf 603 kHz einstellen.	603
3	Depress memory button (M). Speichertaste (M) drücken.	• 603 Memory colon lights. Speicherspalte leuchtet auf
4	Depress a preset button (M1) Eine Vorwahltaste (M1) drücken..	603 Memory colon dislights. Speicherspalte erlöschen.
5	Depress memory button (M). Speichertaste (M) drücken.	• 603 Memory colon lights. Speicherspalte leuchtet auf
6	Depress a preset button (M2). Eine Vorwahltaste (M2) drücken.	603 Memory colon dislights. Speicherspalte erlöschen.
7	Set frequency at 999 kHz. Frequenz auf 999 kHz einstellen.	999
8	Depress memory button (M). Speichertaste (M) drücken.	• 999 Memory colon lights. Speicherspalte leuchtet auf
9	Depress a preset button (M3) Eine Vorwahltaste (M3) drücken.	999 Memory colon dislights. Speicherspalte erlöschen.
10	Set frequency at 1404 kHz. Frequenz auf 1404 kHz einstellen.	1404
11	Depress memory button (M). Speichertaste (M) drücken.	• 1404 Memory colon lights. Speicherspalte leuchtet auf
12	Depress a preset button (M4) Eine Vorwahltaste (M4) drücken.	1404 Memory colon dislights. Speicherspalte erlöschen.
13	Set frequency at 1602 kHz. Frequenz auf 1602 kHz einstellen.	1602
14	Depress memory button (M). Speichertaste (M) drücken.	• 1602 Memory colon lights. Speicherspalte leuchtet auf
15	Depress a preset button (M5) Eine Vorwahltaste (M5) drücken.	1602 Memory colon dislights. Speicherspalte erlöschen.
16	Depress a preset button (M1) Eine Vorwahltaste (M1) drücken.	603
17	Set frequency at 531 kHz. Frequenz auf 531 kHz einstellen.	531
18	Depress memory button (M). Speichertaste (M) drücken.	• 531 Memory colon lights. Speicherspalte leuchtet auf
19	Depress a preset button (M1) Eine Vorwahltaste (M1) drücken.	531 Memory colon dislights. Speicherspalte erlöschen.
20	Depress a preset button (M2). Eine Vorwahltaste (M2) drücken.	603
21	Depress a preset button (M3). Eine Vorwahltaste (M3) drücken.	999
22	Depress a preset button (M4). Eine Vorwahltaste (M4) drücken.	1404
23	Depress a preset button (M5). Eine Vorwahltaste (M5) drücken.	1602
24	Depress a preset button (M1) Eine Vorwahltaste (M1) drücken.	531

6. Preset Memory Function, FM(FKW)

	Procedure Arbeitsgang	Display Anzeige
1	Set band selector in "FM". Bandwahl auf "UKW" stellen.	87.5
2	Set frequency at 88.1 MHz. Frequenz auf 88.1 MHz einstellen.	88.1
3	Depress memory button (M). Speichertaste (M) drücken.	• 88.1 Memory colon lights. Speicherspalte leuchtet auf
4	Depress a preset button (M1) Eine Vorwahltaste (M1) drücken.	88.1 Memory colon dislights. Speicherspalte erlöschen.
5	Set Frequency at 89.9 MHz. Frequenz auf 89.9 MHz einstellen.	89.9
6	Depress memory button (M). Speichertaste (M) drücken.	• 89.9 Memory colon lights. Speicherspalte leuchtet auf
7	Depress a preset button (M2). Eine Vorwahltaste (M2) drücken.	89.9 Memory colon dislights. Speicherspalte erlöschen.
8	Set frequency at 98.1 MHz. Frequenz auf 98.1 MHz einstellen.	98.1
9	Depress memory button (M). Speichertaste (M) drücken.	• 98.1 Memory colon lights. Speicherspalte leuchtet auf
10	Depress a preset button (M3). Eine Vorwahltaste (M3) drücken.	98.1 Memory colon dislights. Speicherspalte erlöschen.
11	Set frequency at 100.1 MHz. Frequenz auf 100.1 MHz einstellen.	100.1
12	Depress memory button (M). Speichertaste (M) drücken.	• 100.1 Memory colon lights. Speicherspalte leuchtet auf
13	Depress a preset button (M4). Eine Vorwahltaste (M4) drücken.	100.1 Memory colon dislights. Speicherspalte erlöschen.
14	Set frequency at 104.0 MHz. Frequenz auf 104.0 MHz einstellen.	104.0
15	Depress memory button (M). Speichertaste (M) drücken.	• 104.0 Memory colon lights. Speicherspalte leuchtet auf
16	Depress a preset button (M5) Eine Vorwahltaste (M5) drücken.	104.0 Memory colon dislights. Speicherspalte erlöschen.
17	Depress a preset button (M1) Eine Vorwahltaste (M1) drücken.	88.1
18	Depress a preset button (M2). Eine Vorwahltaste (M2) drücken.	89.9
19	Depress a preset button (M3). Eine Vorwahltaste (M3) drücken.	98.1
20	Depress a preset button (M4). Eine Vorwahltaste (M4) drucken.	100.1
21	Depress a preset button (M5) Eine Vorwahltaste (M5) drücken.	104.0

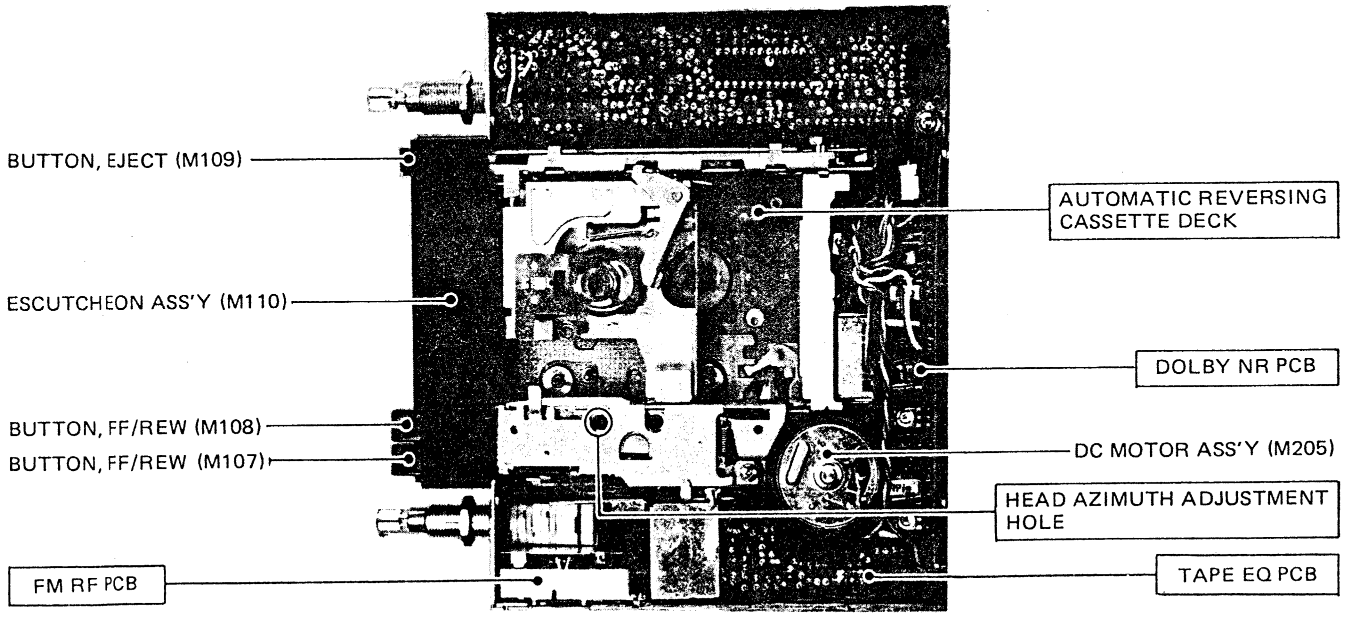
7. VF Function

	Procedure Arbeitsgang	Display Anzeige
1	Set band selector in "VF". Bandwahl auf "VF" stellen.	
2	VF signal (SK/DK) is received. VF-Signal (SK/DK) wird empfangen.	102.7 Is VF VF ind. lights. VF sound is heard. VF-Anzeige leuchtet auf VF-Ton wird gehört.
3	Set volume knob at min. Lautstärkenknopf auf Minimumlautstärke einstellen.	102.7 Is VF Sound is heard. Ton wird gehört.
4	Set SK in ON, DK in OFF. SK auf Ein (ON) und DK auf Aus (OFF) stellen.	102.7 Is VF Sound is not heard. Es wird kein Ton gehört.
5	Set SK/DK in OFF. SK/DK ausstellen.	102.7 Is VF ind. dislights. VF-Anzeige geht aus.
6	after 10 to 25 sec. Nach 10 bis 25 sec.	102.7 Is Warnning tone is heard. Warnsignal ist hörbar.
7	Turn volume knob to right. Lautstärkenknopf nach rechts drehen.	102.7 Is Warnning tone is increased. Warnsignal wird lauter.
8	Insert a music tape. Tonband einlegen.	102.7 Is ▶ Tape ind. lights. Bandanzeige leuchtet auf.
9	Set SK in ON, DK in OFF. SK auf Ein (ON) und DK auf Aus (OFF) stellen.	102.7 Is ▶ VF VF ind. lights. Tape reproduces. VF-Anzeige leuchtet auf Band wird wiedergegeben.
10	Set SK/DK in ON. SK/DK auf An Stellen.	102.7 Is ▶ VF VF sound is heard. VF-Ton ist hörbar.
11	Set SK/DK in OFF. SK/DK aus Aus stellen.	102.7 Is ▶ VF ind. dislights. VF-Anzeige geht aus.
12	after 10 to 25 sec. Nach 10 bis 25 sec.	102.7 Is ▶ Warnning tone is heard. Warnsignal ist hörbar.
13	Set band selector in "FM". Bandwahl auf "UKW" stellen.	1:00 ▶ Tape reproduces. Band wird wieder gegeben.
14	Depress eject button. Auswurftaste drücken.	102.7 Is ▶ FM sound is heard. UKW-Klang ist hörbar.
15	Trun power SW off. Stromschalter ausdrehen.	All display dislights. Alle Anzeigen erlöschen.

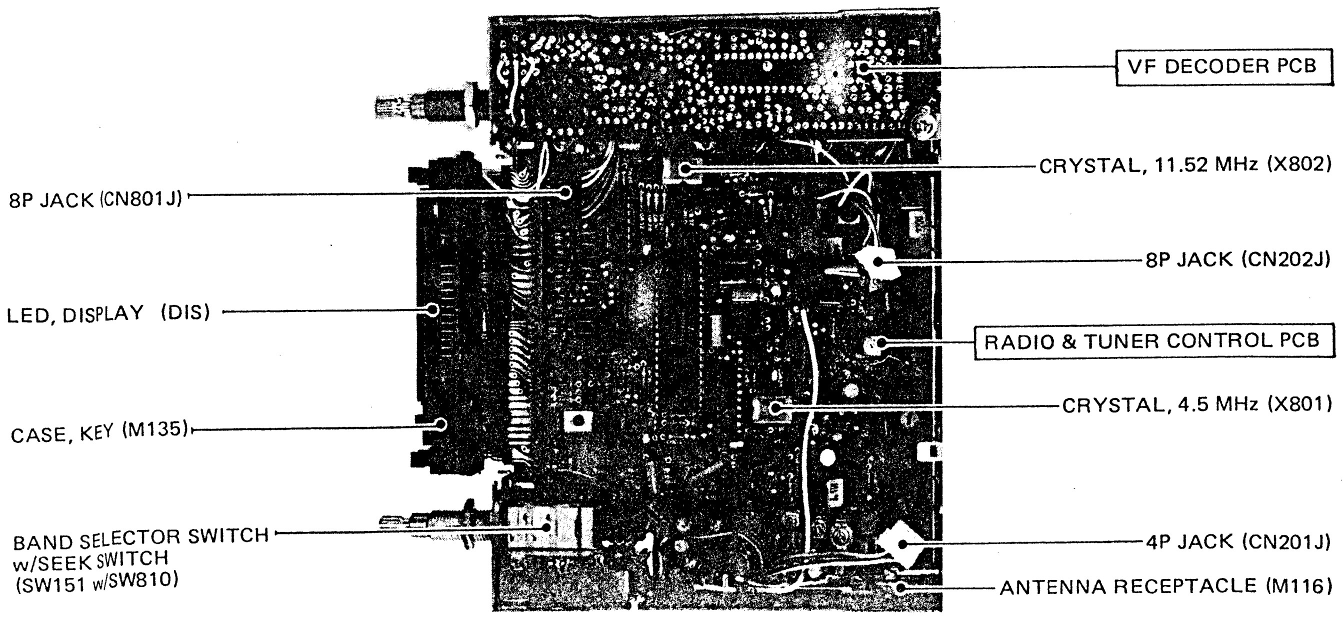
PARTS LOCATION/AW EISUNGEN FÜR DER AUSBAU

- Reference numbers, in ( ), are listed in the Replacement Parts List, starting on page 29.
- For other parts location, see the EXPLODED VIEWS, pages 28, 31 & 48.

TOP VIEW, WITH COVER REMOVED

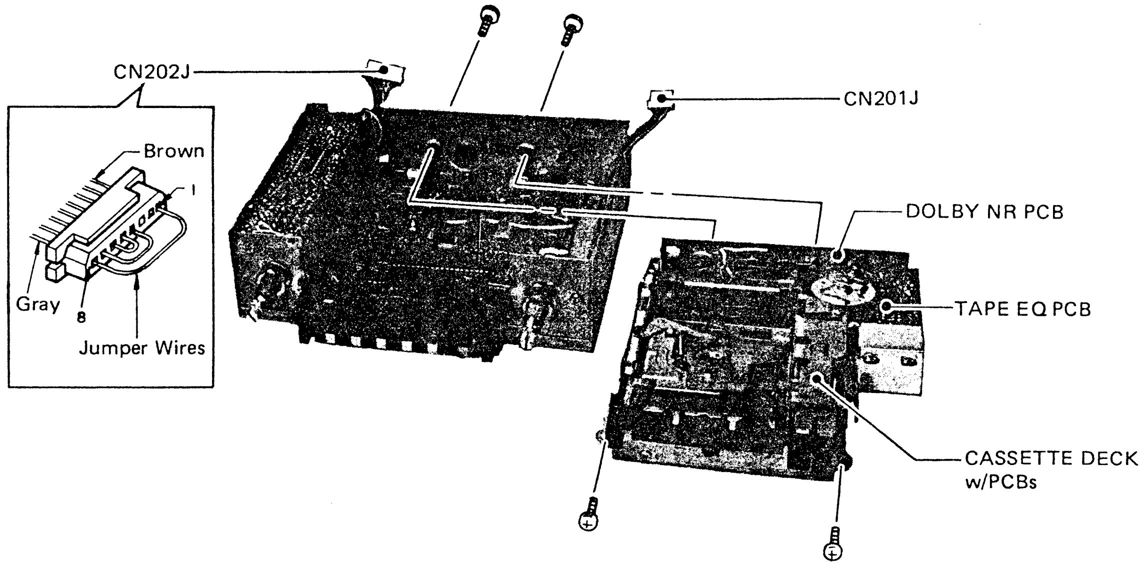

BUTTON, EJECT (M109)
ESCUTCHEON ASS'Y (M110)
BUTTON, FF/REW (M108)
BUTTON, FF/REW (M107)
FM RF PCB
AUTOMATIC REVERSING CASSETTE DECK
DOLBY NR PCB
DC MOTOR ASS'Y (M205)
HEAD AZIMUTH ADJUSTMENT HOLE
TAPE EQ PCB

TOP VIEW, WITH DECK REMOVED

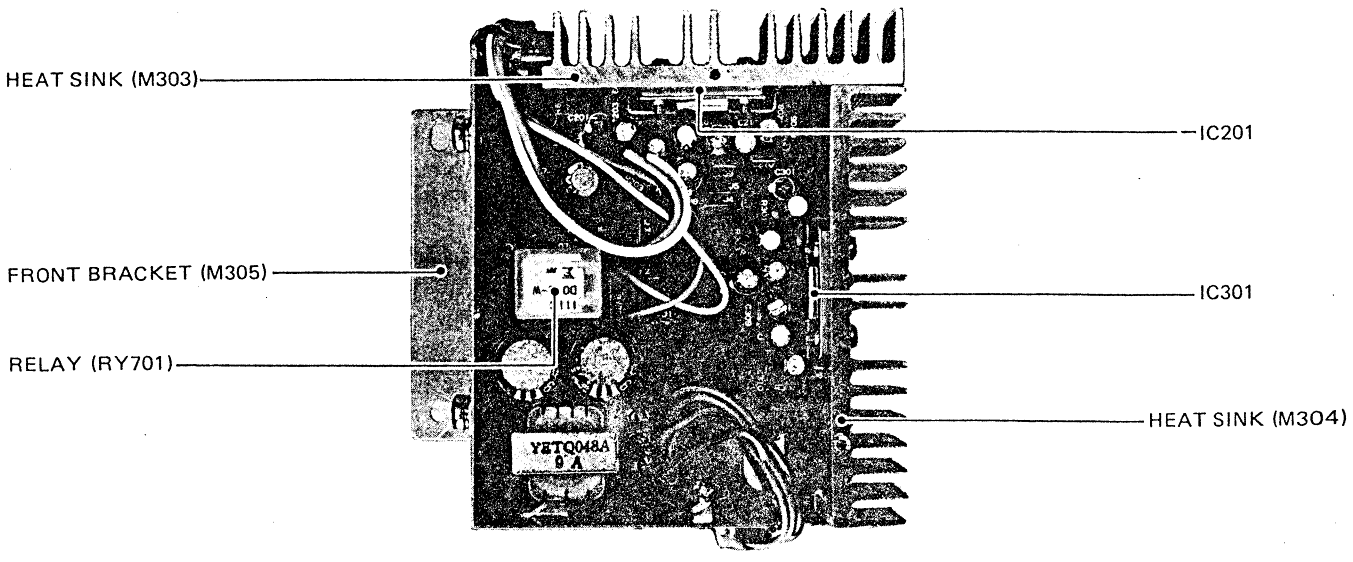

8P JACK (CN801J)
LED, DISPLAY (DIS)
CASE, KEY (M135)
BAND SELECTOR SWITCH w/SEEK SWITCH (SW151 w/SW810)
VF DECODER PCB
CRYSTAL, 11.52 MHz (X802)
8P JACK (CN202J)
RADIO & TUNER CONTROL PCB
CRYSTAL, 4.5 MHz (X801)
4P JACK (CN201J)
ANTENNA RECEPTACLE (M116)

SIDE VIEW, WITH DECK REMOVED

1) Remove the escutcheon ass'y by removing 2 screws.
2) Remove the upper cover by removing 4 screws.
3) Remove 4 screws mounting the cassette deck.
4) Lifting up the cassette deck, disconnect 2 connectors (CN201J & CN202J).
5) If operating the radio when the cassette deck is removed, insert the jumper wires into CN202J as follows.
   No. 1 to No. 8 of CN202J
   No. 5 to No. 6 of CN202J
   No. 4 to No. 7 of CN202J


CN202J
Brown
1
Gray
8
Jumper Wires
CN201J
DOLBY NR PCB
TAPE EQ PCB
CASSETTE DECK w/PCBs

TOP VIEW OF POWER AMP, WITH COVER REMOVED


HEAT SINK (M303)
FRONT BRACKET (M305)
RELAY (RY701)
IC201
IC301
HEAT SINK (M304)

FUSE REPLACEMENT/SICHERUNG

Be sure to use a fuse of specified rating when replacing a blown fuse. (1A for the battery back-up "yellow" lead and 5A for power amplifier's "blue" lead.)

Fuses rated at higher capacity, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

If the replacement fuse fails, contact your nearest shop.

CAUTION:

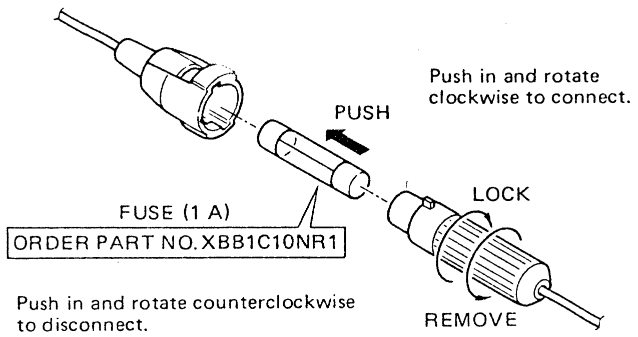
1. Connect the BATTERY LEAD (yellow) direct to the battery. Otherwise, time and memory settings can not be done.
2. If battery connection is disconnected (such as during battery replacement, recharging the battery, etc.), all electronic settings previously done on this unit would fade out. To reset, follow previous instructions on this Operating Instructions.

Muß die Sicherung erneuert werden, nur Sicherungen mit der gleichen Nennstromstärke verwenden. (1A für das gelbe Schutzbatteriekabel und 5A für das blaue Leistungsverstärker oder Ersatzmittel, bzw. Anschluß ohne Sicherung führt zu Feuergefahr oder Beschädigung des Gerätes.

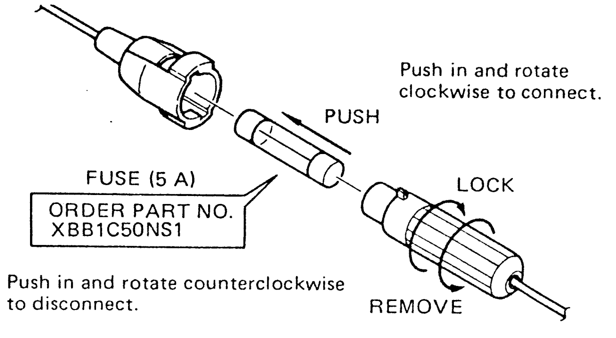
Sollte eine neu eingesetzte Sicherung durchbrennnen, wenden Sie sich bitte an Ihren Fachändler.

ANMERKUNG:

1. Das gelbe BATTERIEKABELS direkt an die Batterie anschließen, da sonst Uhrzeit und Speicher nicht eingestellt werden können.
2. Wenn der Batterieanschluß abgetrennt wird (z.B. beim Auswechseln der Batterie, Aufladen der Batterie usw.), werden alle elektronischen Einstellungen geloscht. In einem solchen Fall gemäß Anleitungen in dieser Bedienungsanleitung die Einstellungen nochmals durch führen.


Push in and rotate clockwise to connect.
PUSH
LOCK
FUSE (1 A)
ORDER PART NO. XBB1C10NR1
Push in and rotate counterclockwise to disconnect.
REMOVE

[UNIT]


Push in and rotate clockwise to connect.
PUSH
FUSE (5 A)
ORDER PART NO. XBB1C50NS1
LOCK
Push in and rotate counterclockwise to disconnect.
REMOVE

[POWER AMPLIFIER]

NORMAL CARE AND MINTENANCE/INSTANDHALTUNG

Tape Head Cleaning

To botain optimum performance from this cassette car stereo, clean the tape head once a week.

The tape head in the cassette car stereo mechanism may accumulate dust and tape residue, causing poor or wavering sound.

To clean the tape head, open the CASSETTE SLOT and clean the residue from the head with a cotton swab dampened with isopropyl alcohol

CUATION: **Do not use any solution other than alcohol for head cleaning.**

Cleaning the Outside

To clean the outside of the set (escutcheon and chassis), wipe off dust with a soft cloth.

Never use benzine, thinner or any other type of solvent.

Reinigen des Tonkopfes

Um optimales Leistungsvermögen dieses Cassetten-Abspielgerätes zu gewährleisten, sollte der Tonkopf einmal pro Woche gereinigt werden.

Auf dem in das Bandlaufwerk eingebauten Tonkopf könnten sich Staub und vom Tonband abgeriebene Oxydpartikel ansammeln, was zu verschlechterter Klangqualität bzw, zu ungleichmäßiger Bandgeschwindigkeit führen könnte.

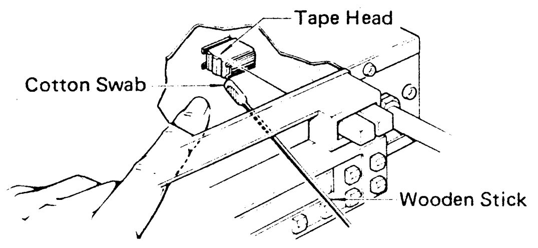
Um den Tonkopf zu reinigen, den CASSETTENSCHACHT öffnen und die Ablagerungen mittels in Alkohol angefeuchtetem Wattebausch entfernen

ANMERKUNG: **Zum Reinigen des Tonkopfes nur Alkohol (niemals andere Lösungsmittel) verwenden.**

Reinigen der Oberfläche

Um die Oberfläche des Gerätes zu reinigen, den Staub mit einem sauberen Putzlappen abwischen.

Niemals Benzin, Verdrünnungsmittel oder andere Lösungsmittel verwenden.


Tape Head
Cotton Swab
Wooden Stick

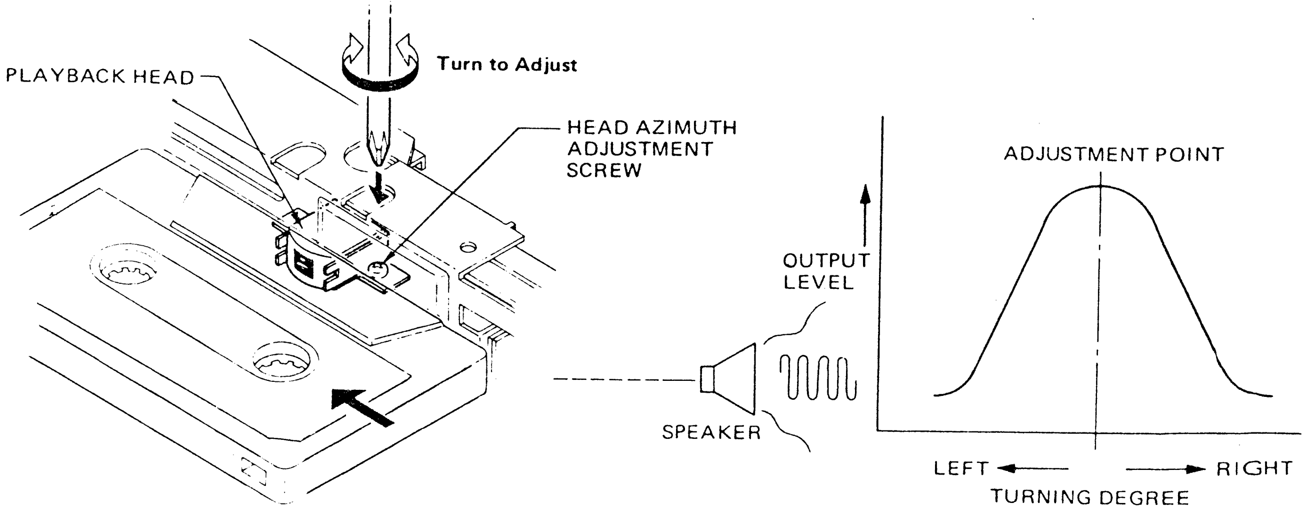
HEAD AZIMUTH ADJUSTMENT/EINSTELUNG DES TONKOPFSEITENWINKELS

Head adjustment may be required for cases of crosstalk, poor high frequency response, or if the head has been replaced.

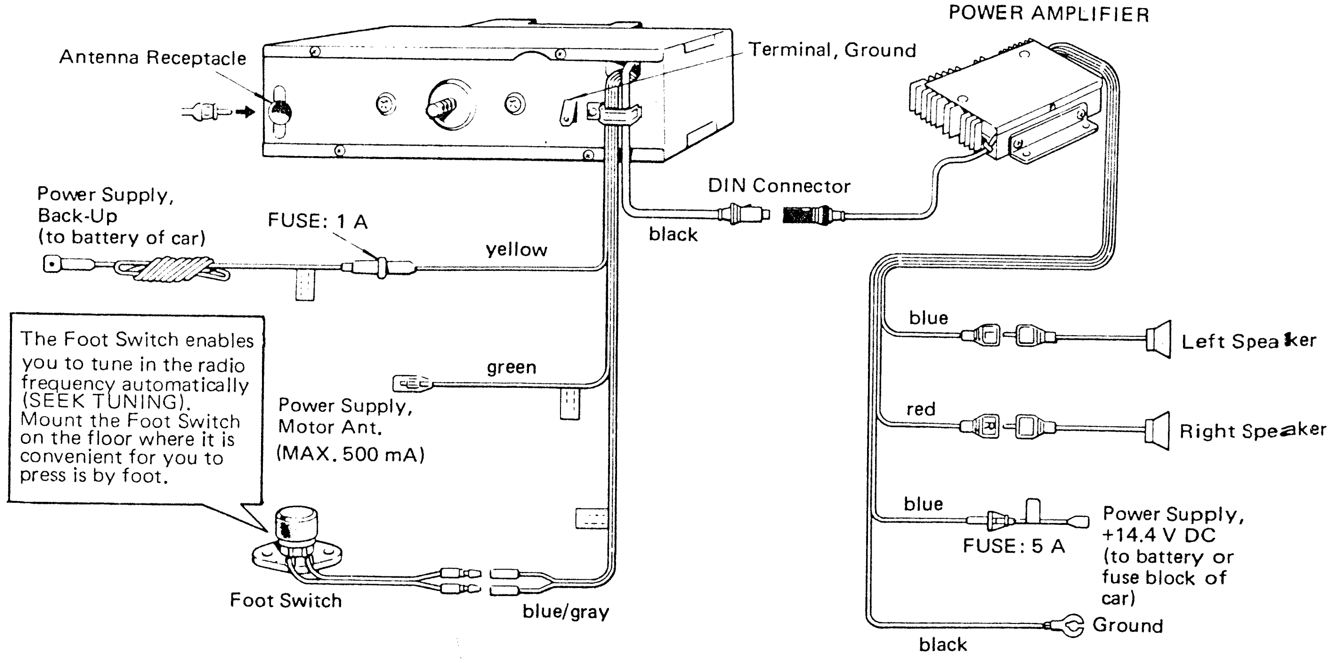
1) When test tape is available.
   Insert a cassette test tape and adjust the azimuth adjustment screw for maximum output from the speakers.
2) When test tape is not available.
   Insert a music cassette tape (music containing treble is recommended), and rotate the azimuth adjustment screw for maximum treble.

Die Justierung des Tonkopfes ist erforderlich, wenn Übersprechstörungen auftreten, die Übertragung von höheren Frequenzen beeinträchtigt wird oder der Tonkopf ausgewechself worden ist.

1) Falls ein Testband zur Verfügung steht:
   Legen Sie die Compact-Cassetten mit Testband ein und drehen Sie die Einstellschraube, bis die Lautstärke ein Maximum erreicht.
2) Falls kein Testband zur Verfügung steht:
   Legen Sie eine Musik-Cassette (zu empfehlen; Musik in höherer Tonlage) ein und drehen Sie die Einstellschraube bis der Hochton am stärksten wiedergegeben wird.

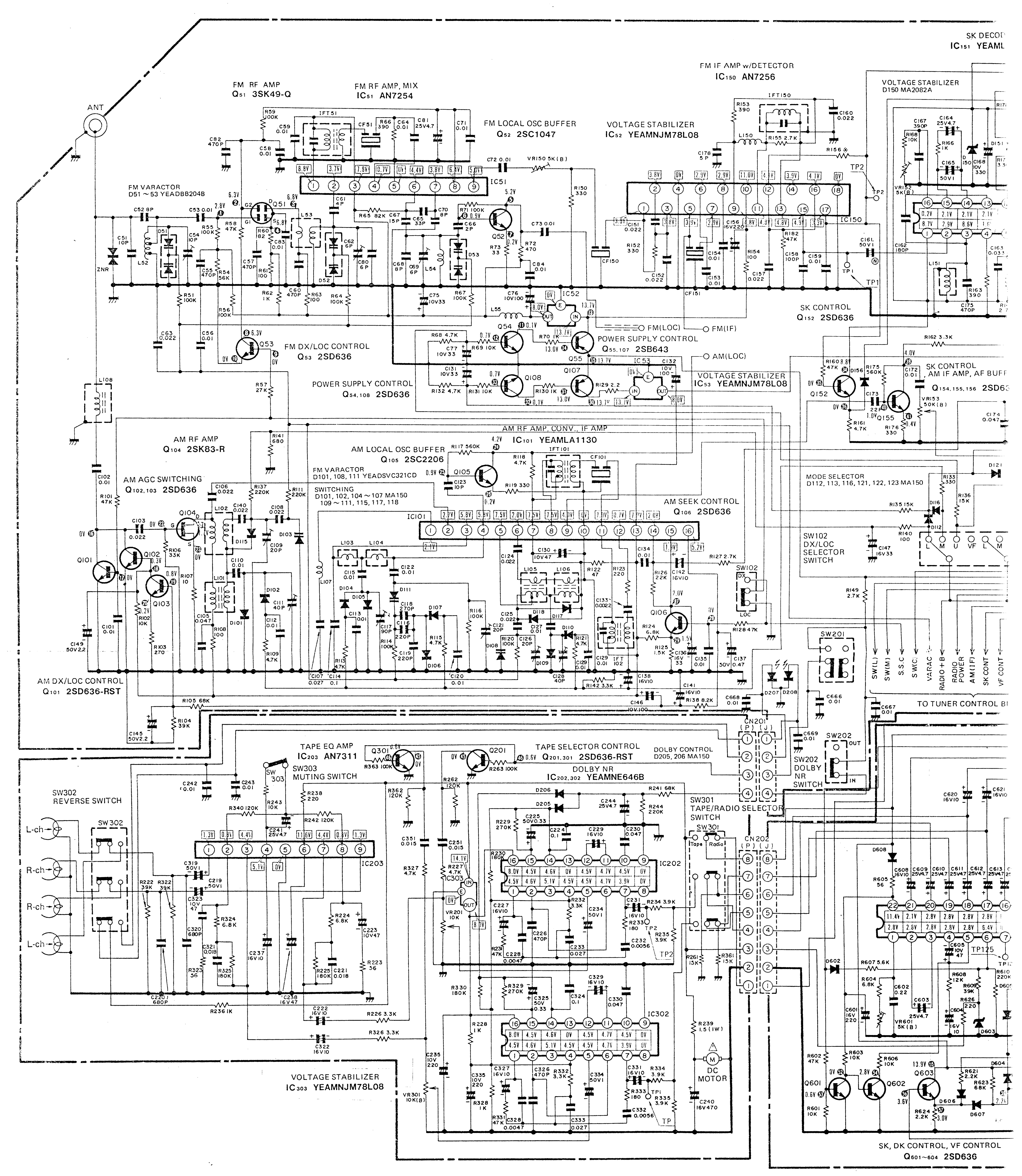

Turn to Adjust
PLAYBACK HEAD
HEAD AZIMUTH ADJUSTMENT SCREW
OUTPUT LEVEL
SPEAKER
ADJUSTMENT POINT
LEFT
RIGHT
TURNING DEGREE

CONNECTING DIAGRAM/ANSCHLUSS-SCHALTBILD


POWER AMPLIFIER
Antenna Receptacle
Terminal, Ground
DIN Connector
Power Supply, Back-Up (to battery of car)
FUSE: 1 A
yellow
black
green
Power Supply, Motor Ant. (MAX. 500 mA)
Foot Switch
blue/gray
blue
Left Speaker
red
Right Speaker
blue
FUSE: 5 A
Power Supply, +14.4 V DC (to battery or fuse block of car)
Ground
black

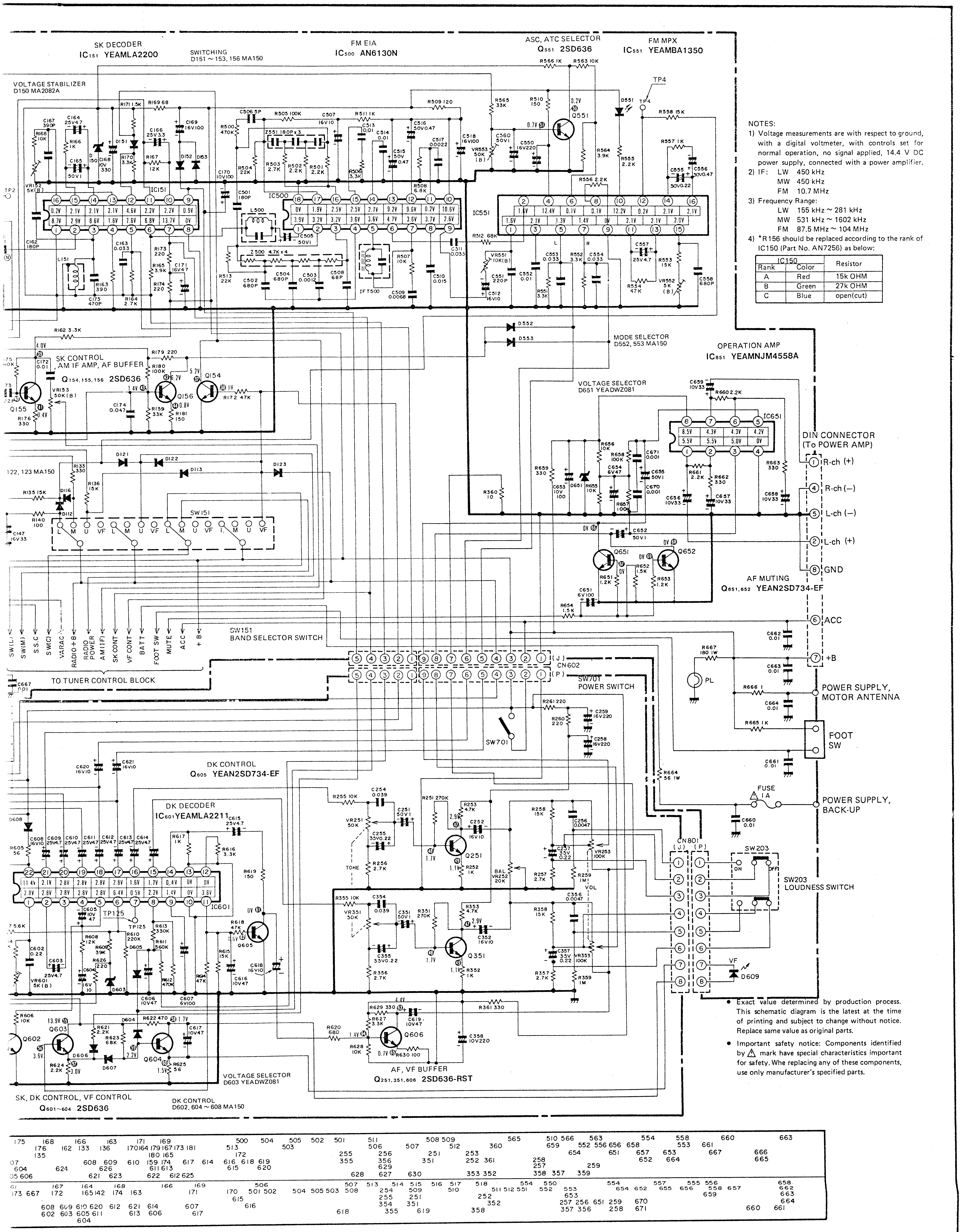
The Foot Switch enables you to tune in the radio frequency automatically (SEEK TUNING). Mount the Foot Switch on the floor where it is convenient for you to press is by foot.

SCHEMATIC DIAGRAM/SCHALTBILT MODEL CQ-954EG(TAPE & RADIO BLOCK)


ANT
FM RF AMP
Q51 3SK49-Q
FM RF AMP, MIX
IC51 AN7254
FM LOCAL OSC BUFFER
Q52 2SC1047
VOLTAGE STABILIZER
IC52 YEAMNJM78L08
FM IF AMP w/DETECTOR
IC150 AN7256
VOLTAGE STABILIZER
D150 MA2082A
SK DECO
IC151 YEAML
FM VARACTOR
D51~53 YEADBB204B
ZNR
FM DX/LOC CONTROL
Q53 2SD636
POWER SUPPLY CONTROL
Q55,107 2SB643
POWER SUPPLY CONTROL
Q54,108 2SD636
VOLTAGE STABILIZER
IC53 YEAMNJM78L08
FM(LOC)
FM(IF)
AM(LOC)
SK CONTROL
Q152 2SD636
SK CONTROL
AM IF AMP, AF BUFF
Q154,155,156 2SD63
TP1
TP2
AM RF AMP
Q104 2SK83-R
AM AGC SWITCHING
Q102,103 2SD636
AM LOCAL OSC BUFFER
Q105 2SC2206
AM RF AMP, CONV., IF AMP
IC101 YEAMLA1130
FM VARACTOR
D101, 108, 111 YEADSVC321CD
SWITCHING
D101, 102, 104~107 MA150
109~111, 115, 117, 118
AM SEEK CONTROL
Q106 2SD636
MODE SELECTOR
D112, 113, 116, 121, 122, 123 MA150
SW102
DX/LOC
SELECTOR
SWITCH
L M U VF L M
AM DX/LOC CONTROL
Q101 2SD636-RST
SW(L)
SW(M)
S.S.C
SW(C)
VARAC
RADIO+B
RADIO POWER
AM(IF)
SK CONT
VF CONT
TO TUNER CONTROL B
SW201
SW202
CN201
(P) (J)
SW202
DOLBY
NR
SWITCH
OUT
IN
TAPE EQ AMP
IC203 AN7311
SW303
MUTING SWITCH
TAPE SELECTOR CONTROL
Q201,301 2SD636-RST
DOLBY CONTROL
D205, 206 MA150
DOLBY NR
IC202,302 YEAMNE646B
SW302
REVERSE SWITCH
L-ch
R-ch
R-ch
L-ch
SW301
TAPE/RADIO SELECTOR
SWITCH
Tape
Radio
CN202
(P) (J)
IC202
IC203
IC302
IC303
VOLTAGE STABILIZER
IC303 YEAMNJM78L08
M
DC
MOTOR
TP
SK, DK CONTROL, VF CONTROL
Q601~604 2SD636

R	101 102 103 106 51 55 54 59 63 64 65 66 68 71 69 73 72 70 150 129 152 126 153 154 155 182 156 161 175 168 166 163 17 104 107 108 56 137 61 60 62 111 113 114 132 117 131 119 118 130 122 124 125 138 127 128 160 176 162 133 136 170 16 105 57 109 141 363 362 115 262 116 120 142 233 244 241 135 324 340 243 238 224 223 226 327 240 227 229 332 232 333 334 235 239 361 261 607 608 609 610 222 322 323 325 242 225 326 330 228 231 329 335 602 603 604 624 626 236 328 331 601 605 606 621 623
C	51 52 63 54 53 55 82 57 58 59 61 62 80 64 81 66 71 72 124 83 73 133 151 152 178 154 156 157 158 159 160 161 167 164 168 102 103 56 140 109 108 83 60 107 114 115 117 68 65 75 77 123 121 125 76 84 128 129 146 134 132 136 153 668 137 669 173 667 172 165 142 174 163 149 101 145 220 242 105 106 110 112 111 113 122 131 120 227 126 127 130 224 229 244 138 141 666 601 319 219 243 241 222 221 223 116 118 251 228 225 233 234 232 230 608 609 610 620 612 621 323 321 237 238 322 351 235 335 327 226 324 329 330 231 602 603 605 611 613 328 325 326 333 334 332 331 239 604

Mar., 1981


SK DECODER
IC151 YEAMLA2200
SWITCHING
D151 ~ 153, 156 MA150
FM EIA
IC500 AN6130N
ASC, ATC SELECTOR
Q551 2SD636
FM MPX
IC551 YEAMBA1350
VOLTAGE STABILIZER
D150 MA2082A
TP4
MODE SELECTOR
D552, 553 MA150
OPERATION AMP
IC651 YEAMNJM4558A
VOLTAGE SELECTOR
D651 YEADWZ081
SK CONTROL
AM IF AMP, AF BUFFER
Q154, 155, 156 2SD636
DIN CONNECTOR
(To POWER AMP)
R-ch (+)
R-ch (−)
L-ch (−)
L-ch (+)
GND
AF MUTING
Q651, 652 YEAN2SD734-EF
ACC
+B
SW151
SW151
BAND SELECTOR SWITCH
SW (L)
SW (M)
S.S.C
SW (C)
VARAC
RADIO + B
RADIO POWER
AM (IF)
SK CONT
VF CONT
BATT
FOOT SW
MUTE
ACC
+ B
TO TUNER CONTROL BLOCK
CN602
(J)
(P)
SW701
POWER SWITCH
PL
POWER SUPPLY,
MOTOR ANTENNA
FOOT
SW
DK CONTROL
Q605 YEAN2SD734-EF
DK DECODER
IC601 YEAMLA2211
TONE
BAL
VOL
FUSE
1A
POWER SUPPLY,
BACK-UP
CN801
SW203
ON
OFF
SW203
LOUDNESS SWITCH
VF
D609
TP125
AF, VF BUFFER
Q251, 351, 606 2SD636-RST
VOLTAGE SELECTOR
D603 YEADWZ081
SK, DK CONTROL, VF CONTROL
Q601 ~ 604 2SD636
DK CONTROL
D602, 604 ~ 608 MA150

NOTES:

1) Voltage measurements are with respect to ground, with a digital voltmeter, with controls set for normal operation, no signal applied, 14.4 V DC power supply, connected with a power amplifier.

2) IF:
LW 450 kHz
MW 450 kHz
FM 10.7 MHz

3) Frequency Range:
LW 155 kHz ~ 281 kHz
MW 531 kHz ~ 1602 kHz
FM 87.5 MHz ~ 104 MHz

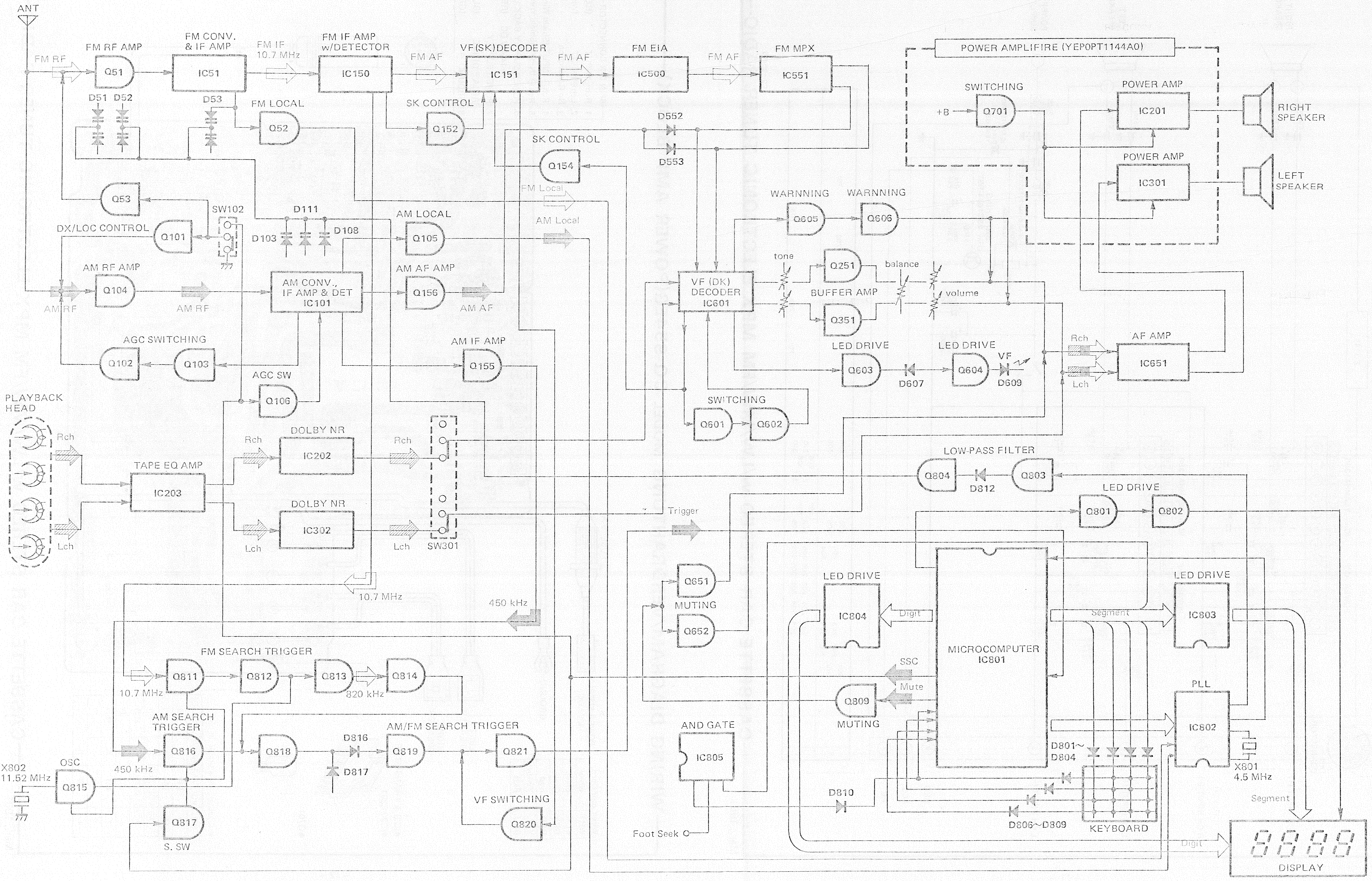
4) *R156 should be replaced according to the rank of IC150 (Part No. AN7256) as below:

IC150		Resistor
Rank	Color	
A	Red	15k OHM
B	Green	27k OHM
C	Blue	open(cut)

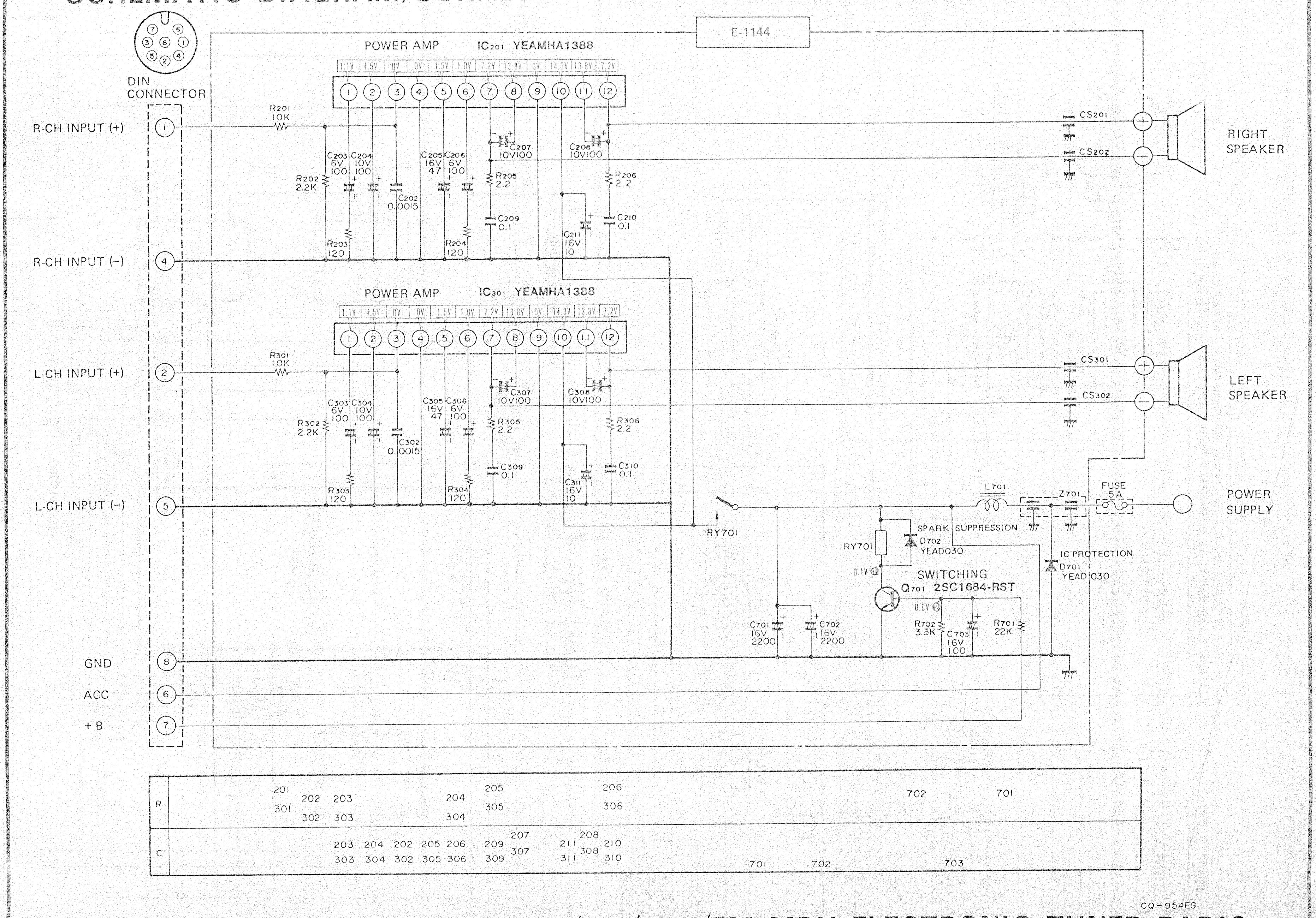
- Exact value determined by production process. This schematic diagram is the latest at the time of printing and subject to change without notice. Replace same value as original parts.
- Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. Whe replacing any of these components, use only manufacturer's specified parts.

CASSETTE CAR STEREO w/LW/MW/FM MPX ELECTRONIC TUNER RADIO

BLOCK DIAGRAM/BLOCK-SCHALTBILD


ANT
FM RF
FM RF AMP
Q51
FM CONV. & IF AMP
IC51
FM IF 10.7 MHz
FM IF AMP w/DETECTOR
IC150
FM AF
VF(SK)DECODER
IC151
FM AF
FM EIA
IC500
FM AF
FM MPX
IC551
POWER AMPLIFIRE (YEP0PT1144A0)
SWITCHING
+B
Q701
POWER AMP
IC201
RIGHT SPEAKER
POWER AMP
IC301
LEFT SPEAKER
D51
D52
D53
FM LOCAL
Q52
SK CONTROL
Q152
D552
D553
SK CONTROL
Q154
FM Local
AM Local
Q53
SW102
DX/LOC CONTROL
Q101
D111
D103
D108
AM LOCAL
Q105
WARNNING
Q605
WARNNING
Q606
tone
Q251
balance
BUFFER AMP
volume
Q351
VF (DK) DECODER
IC601
AM RF AMP
Q104
AM RF
AM RF
AM CONV., IF AMP & DET
IC101
AM AF AMP
Q156
AM AF
AGC SWITCHING
Q102
Q103
AM IF AMP
Q155
LED DRIVE
Q603
D607
LED DRIVE
Q604
VF
D609
Rch
Lch
AF AMP
IC651
AGC SW
Q106
SWITCHING
Q601
Q602
PLAYBACK HEAD
Rch
Lch
TAPE EQ AMP
IC203
Rch
DOLBY NR
IC202
Rch
DOLBY NR
IC302
Lch
Lch
SW301
LOW-PASS FILTER
Q804
D812
Q803
LED DRIVE
Q801
Q802
Trigger
Q651
MUTING
Q652
10.7 MHz
450 kHz
LED DRIVE
IC804
Digit
MICROCOMPUTER
IC801
Segment
LED DRIVE
IC803
FM SEARCH TRIGGER
Q811
Q812
Q813
Q814
10.7 MHz
820 kHz
SSC
Mute
Q809
MUTING
PLL
IC802
AM SEARCH TRIGGER
Q816
450 kHz
Q818
D816
D817
AM/FM SEARCH TRIGGER
Q819
Q821
AND GATE
IC805
D801~D804
X801 4.5 MHz
X802 11.52 MHz
OSC
Q815
D810
D806~D809
KEYBOARD
Segment
VF SWITCHING
Q820
Q817
S. SW
Foot Seek
Digit
8888
DISPLAY

SCHEMATIC DIAGRAM/SCHALTBILT MODEL CQ-954EG(POWER AMP BLOCK)

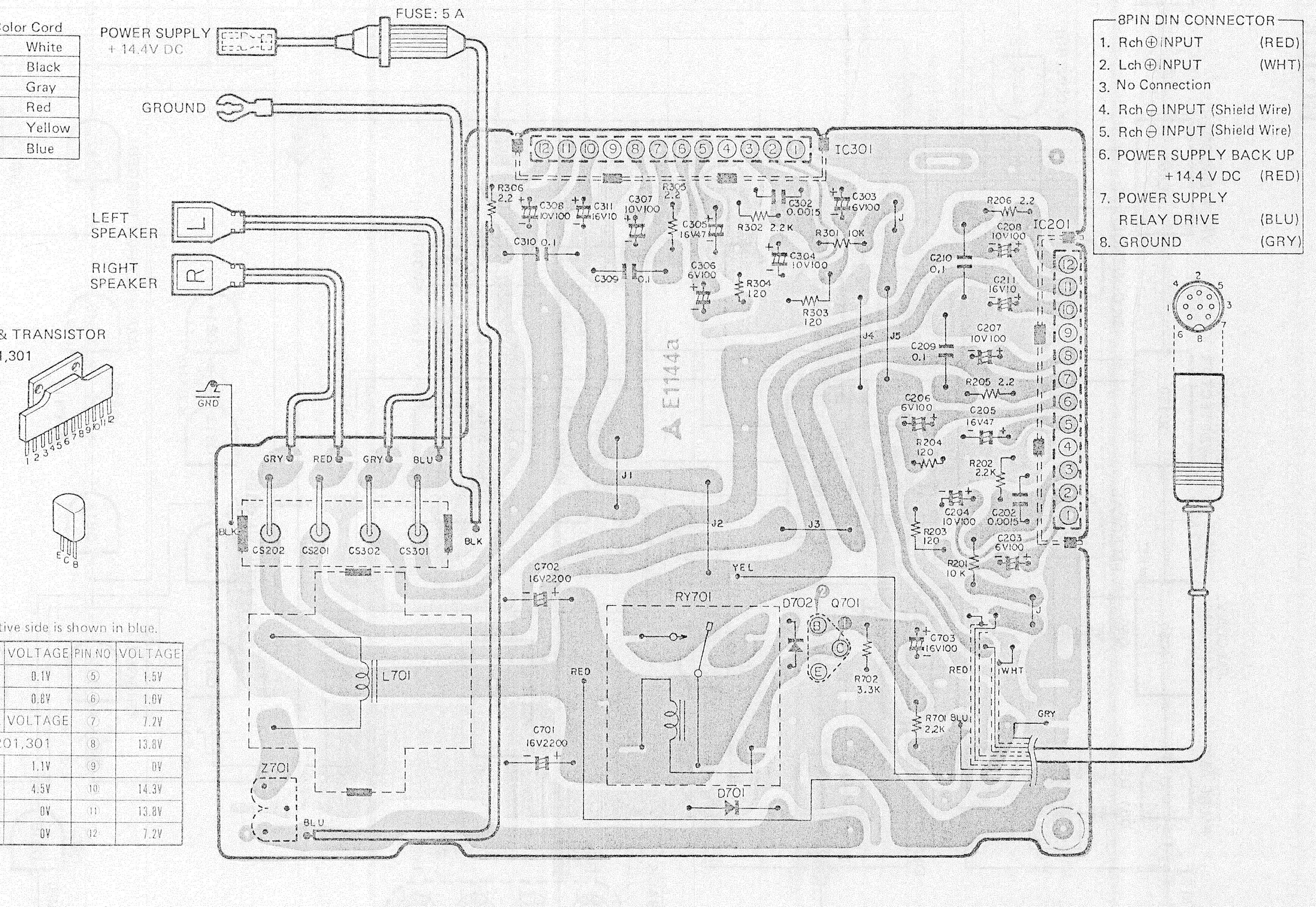

DIN CONNECTOR
E-1144
POWER AMP IC201 YEAMHA1388
POWER AMP IC301 YEAMHA1388
R-CH INPUT (+)
R-CH INPUT (−)
L-CH INPUT (+)
L-CH INPUT (−)
GND
ACC
+B
R201 10K
R202 2.2K
R203 120
C203 6V 100
C204 10V 100
C202 0.0015
C205 16V 47
C206 6V 100
R204 120
C207 10V100
R205 2.2
C209 0.1
C208 10V100
C211 16V 10
R206 2.2
C210 0.1
R301 10K
R302 2.2K
R303 120
C303 6V 100
C304 10V 100
C302 0.0015
C305 16V 47
C306 6V 100
R304 120
C307 10V100
R305 2.2
C309 0.1
C308 10V100
C311 16V 10
R306 2.2
C310 0.1
CS201
CS202
CS301
CS302
RIGHT SPEAKER
LEFT SPEAKER
RY701
L701
Z701
FUSE 5A
POWER SUPPLY
SPARK SUPPRESSION
D702 YEAD030
IC PROTECTION
D701 YEAD030
SWITCHING
Q701 2SC1684-RST
0.1V
0.8V
C701 16V 2200
C702 16V 2200
R702 3.3K
C703 16V 100
R701 22K
R
201 301 202 302 203 303 204 304 205 305 206 306 702 701
C
203 303 204 304 202 302 205 305 206 306 209 309 207 307 211 311 208 308 210 310 701 702 703
CQ−954EG

CASSETTE CAR STEREO w/LW/MW/FM MPX ELECTRONIC TUNER RADIO

WIRING DIAGRAM/VERDRAHTUNG MODEL CQ-954EG(POWER AMP BLOCK)

Wire Color Cord

WHT	White
BLK	Black
GRY	Gray
RED	Red
YEL	Yellow
BLU	Blue


FUSE: 5 A
POWER SUPPLY
+14.4V DC
GROUND
LEFT SPEAKER
L
RIGHT SPEAKER
R
GND
GRY
RED
GRY
BLU
BLK
BLK
CS202
CS201
CS302
CS301
IC301
IC201
E1144a
L701
Z701
RY701
D702
Q701
D701
C702 16V2200
C701 16V2200
YEL
RED
BLU
WHT
GRY
R701 22K
R702 3.3K
C703 16V100
J1
J2
J3
J4
J5
E C B

■IC'S & TRANSISTOR
●IC201,301
●Q701

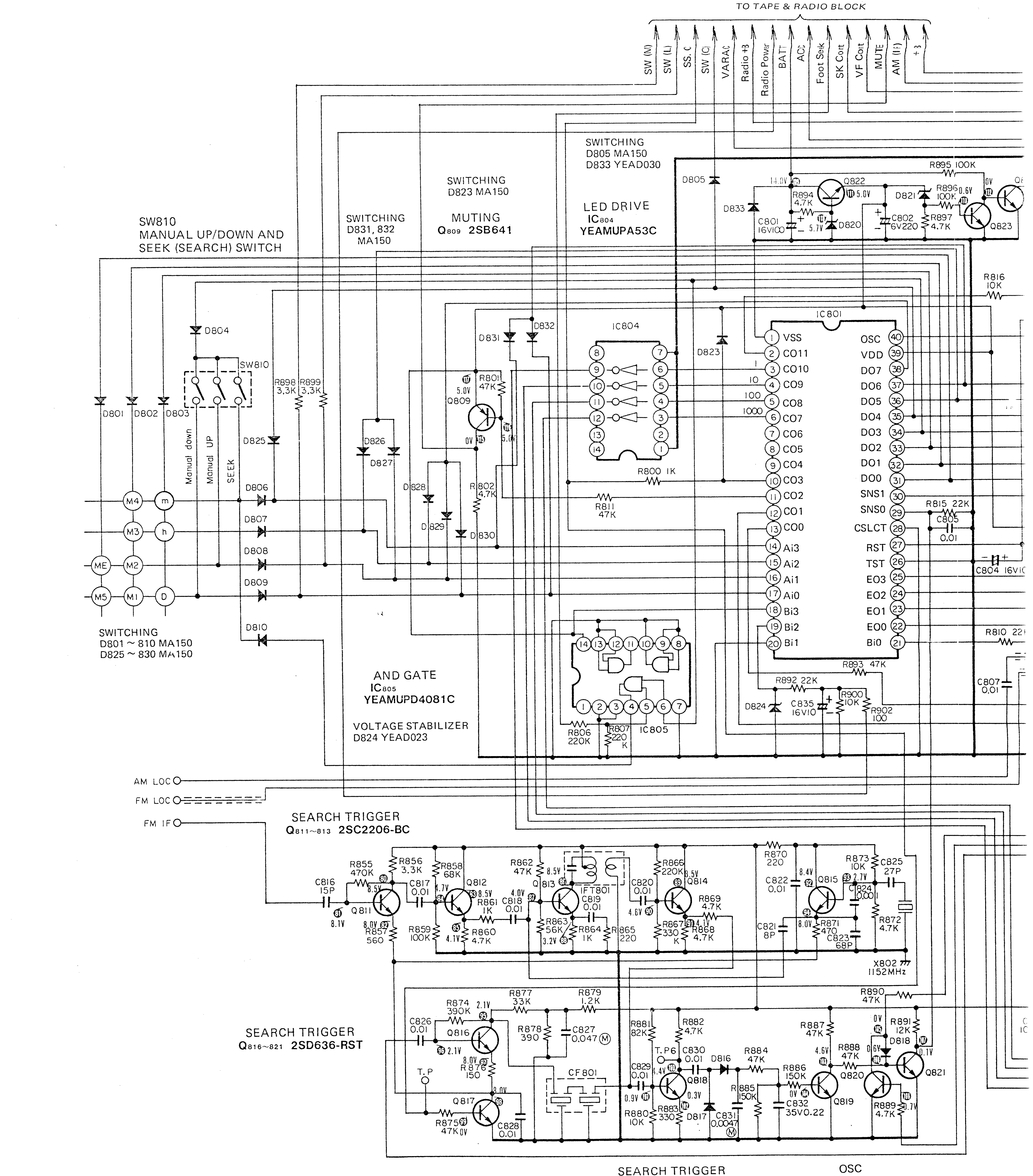
8PIN DIN CONNECTOR
1. Rch⊕INPUT (RED)
2. Lch⊕INPUT (WHT)
3. No Connection
4. Rch⊖INPUT (Shield Wire)
5. Rch⊖INPUT (Shield Wire)
6. POWER SUPPLY BACK UP +14.4 V DC (RED)
7. POWER SUPPLY RELAY DRIVE (BLU)
8. GROUND (GRY)

■Negative side is shown in blue.

NO.	VOLTAGE	PIN NO	VOLTAGE
❶	0.1V	⑤	1.5V
❷	0.8V	⑥	1.0V
PIN NO.	VOLTAGE	⑦	7.2V
IC201,301		⑧	13.8V
①	1.1V	⑨	0V
②	4.5V	⑩	14.3V
③	0V	⑪	13.8V
④	0V	⑫	7.2V

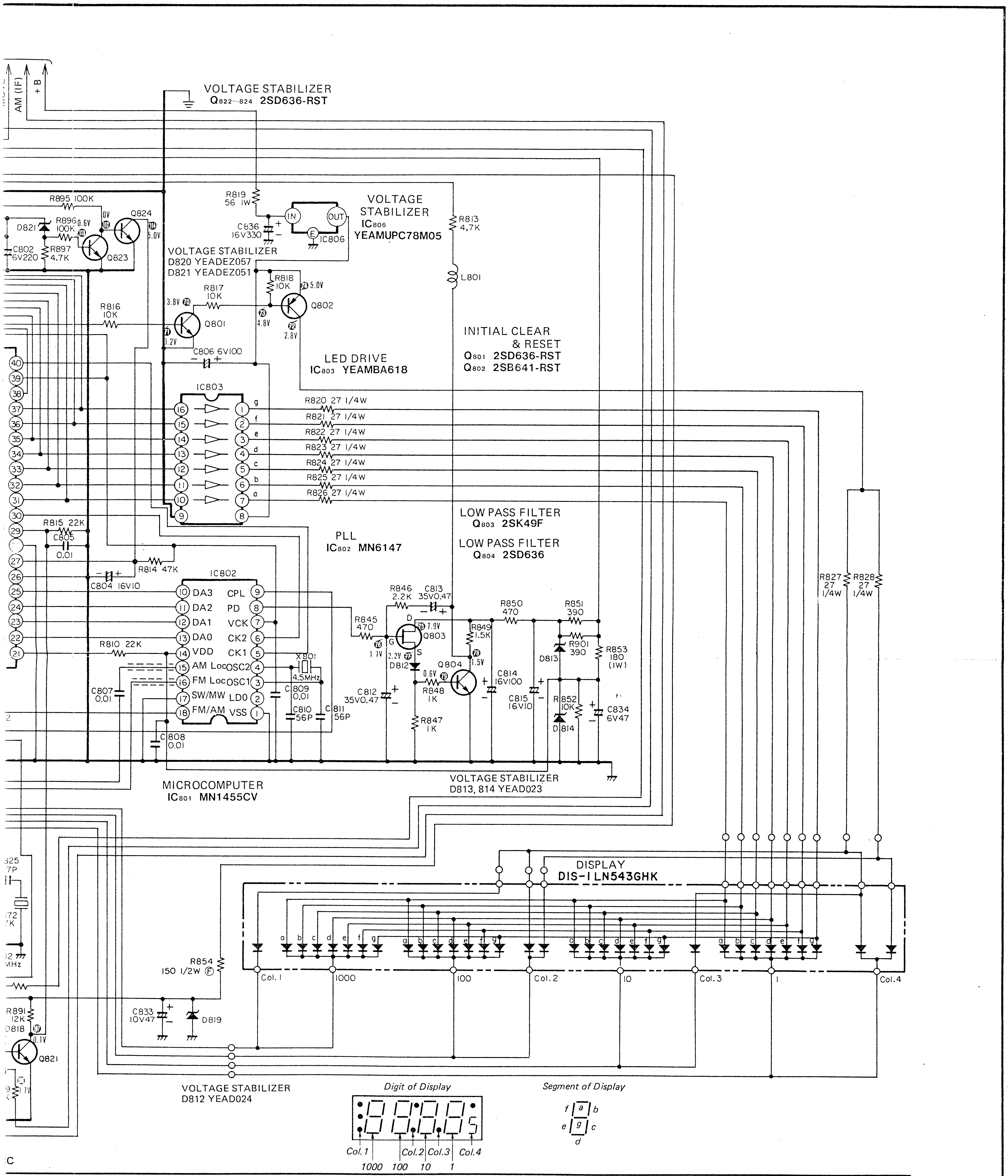
CASSETTE CAR STEREO w/LW/MW/FM MPX ELECTRONIC TUNER RADIO

SCHEMATIC DIAGRAM/SCHALTBILT MODEL CQ-954EG(TUNER CONTROL BLOCK)


TO TAPE & RADIO BLOCK
SW (M)
SW (L)
SS. C
SW (C)
VARAC
Radio +3
Radio Power
BATT
ACC
Foot Sek
SK Cont
VF Cont
MUTE
AM (IF)
+3
SWITCHING D805 MA150 D833 YEAD030
SWITCHING D823 MA150
MUTING Q809 2SB641
LED DRIVE IC804 YEAMUPA53C
SWITCHING D831, 832 MA150
SW810 MANUAL UP/DOWN AND SEEK (SEARCH) SWITCH
IC804
IC801
VSS
CO11
CO10
CO9
CO8
CO7
CO6
CO5
CO4
CO3
CO2
CO1
CO0
Ai3
Ai2
Ai1
Ai0
Bi3
Bi2
Bi1
OSC
VDD
DO7
DO6
DO5
DO4
DO3
DO2
DO1
DO0
SNS1
SNS0
CSLCT
RST
TST
EO3
EO2
EO1
EO0
BiO
Manual down
Manual UP
SEEK
M4
M3
M2
M1
M5
ME
m
h
D
SWITCHING D801 ~ 810 MA150 D825 ~ 830 MA150
AND GATE IC805 YEAMUPD4081C
VOLTAGE STABILIZER D824 YEAD023
IC805
AM LOC
FM LOC
FM IF
SEARCH TRIGGER Q811~813 2SC2206-BC
SEARCH TRIGGER Q816~821 2SD636-RST
SEARCH TRIGGER Q814 2SD636
OSC Q815 2SC2206-BC
IFT801
CF801
X802 1152MHz
T.P
T.P6
R895 100K
R894 4.7K
R896 100K
R897 4.7K
C801 16V100
C802 6V220
R816 10K
R898 3.3K
R899 3.3K
R801 47K
R802 4.7K
R800 1K
R811 47K
R815 22K
C805 0.01
C804 16V10
R810 22
R893 47K
R892 22K
C807 0.01
R900 10K
R902 100
C835 16V10
R806 220K
R807 220K
R855 470K
R856 3.3K
R858 68K
C816 15P
C817 0.01
R857 560
R859 100K
R860 4.7K
R861 1K
R862 47K
C818 0.01
C819 0.01
R863 56K
R864 1K
R865 220
R866 220K
C820 0.01
R869 4.7K
R867 330K
R868 4.7K
R870 220
C822 0.01
R873 10K
C825 27P
C824 0.001
R872 4.7K
C821 8P
R871 470
C823 68P
R874 390K
C826 0.01
R877 33K
R879 1.2K
R878 390
C827 0.047
R876 150
R875 47K
C828 0.01
R881 82K
R882 4.7K
C830 0.01
C829 0.01
R880 10K
R883 330
C831 0.0047
R884 47K
R885 150K
R886 150K
C832 35V0.22
R887 47K
R888 47K
R890 47K
R891 12K
R889 4.7K
Q809
Q811
Q812
Q813
Q814
Q815
Q816
Q817
Q818
Q819
Q820
Q821
Q822
Q823
D801
D802
D803
D804
D805
D806
D807
D808
D809
D810
D816
D817
D818
D820
D821
D823
D824
D825
D826
D827
D828
D829
D830
D831
D832
D833

R	898 899 856 858 861 801 862 811 800 882 870 892 894 873 894 895 855 857 859 860 802 863 864 806 807 811 866 869 887 888 900 891 896 815 874 877 878 879 865 867 868 884 886 871 890 902 897 875 876 880 883 885 889
C	816 817 827 819 801 835 802 805 804 826 818 820 830 822 823 805 805 828 829 831 832 821

Mar., 1981



AM (IF)
+B
VOLTAGE STABILIZER
Q822~824 2SD636-RST
R895 100K
D821
R896 100K
0.6V
0V
Q824
5.0V
C802 6V220
R897 4.7K
Q823
R819 56 1W
C836 16V330
IN
OUT
E
IC806
VOLTAGE STABILIZER
IC806
YEAMUPC78M05
R813 4.7K
L801
VOLTAGE STABILIZER
D820 YEADEZ057
D821 YEADEZ051
R818 10K
5.0V
Q802
R817 10K
3.8V
4.8V
2.8V
R816 10K
Q801
1.2V
C806 6V100
INITIAL CLEAR
& RESET
Q801 2SD636-RST
Q802 2SB641-RST
LED DRIVE
IC803 YEAMBA618
IC803
R820 27 1/4W
R821 27 1/4W
R822 27 1/4W
R823 27 1/4W
R824 27 1/4W
R825 27 1/4W
R826 27 1/4W
g
f
e
d
c
b
a
LOW PASS FILTER
Q803 2SK49F
LOW PASS FILTER
Q804 2SD636
PLL
IC802 MN6147
R815 22K
C805 0.01
R814 47K
C804 16V10
IC802
DA3
DA2
DA1
DA0
VDD
AM Loc
FM Loc
SW/MW
FM/AM
CPL
PD
VCK
CK2
CK1
OSC2
OSC1
LDO
VSS
R810 22K
X801 4.5MHz
C807 0.01
C809 0.01
C810 56P
C811 56P
C808 0.01
R846 2.2K
C813 35V0.47
R845 470
Q803
D
G
S
7.9V
1.7V
2.2V
D812
R849 1.5K
1.5V
Q804
0.6V
R848 1K
R847 1K
C812 35V0.47
R850 470
R851 390
R901 390
R853 180 (1W)
D813
C814 16V100
C815 16V10
R852 10K
D814
C834 6V47
R827 27 1/4W
R828 27 1/4W
MICROCOMPUTER
IC801 MN1455CV
VOLTAGE STABILIZER
D813, 814 YEAD023
DISPLAY
DIS-1 LN543GHK
Col. 1
1000
100
Col. 2
10
Col. 3
1
Col. 4
R854 150 1/2W
F
C833 10V47
D819
R891 12K
D818
0.1V
Q821
VOLTAGE STABILIZER
D812 YEAD024
Digit of Display
Col. 1
Col. 2
Col. 3
Col. 4
1000
100
10
1
Segment of Display
a
b
c
d
e
f
g
C

894 895 . 819 820 849 850 851 853 827 828
300 891 896 815 810 814 817 818 821 845 846 848 813 901
390 902 897 822 825
389 854 823 826 847 852

802 805 804 806 835 813
805 805 833 808 809 812 814 815 834
807 810 811

CASSETTE CAR STEREO w/LW/MW/FM MPX ELECTRONIC TUNER RADIO

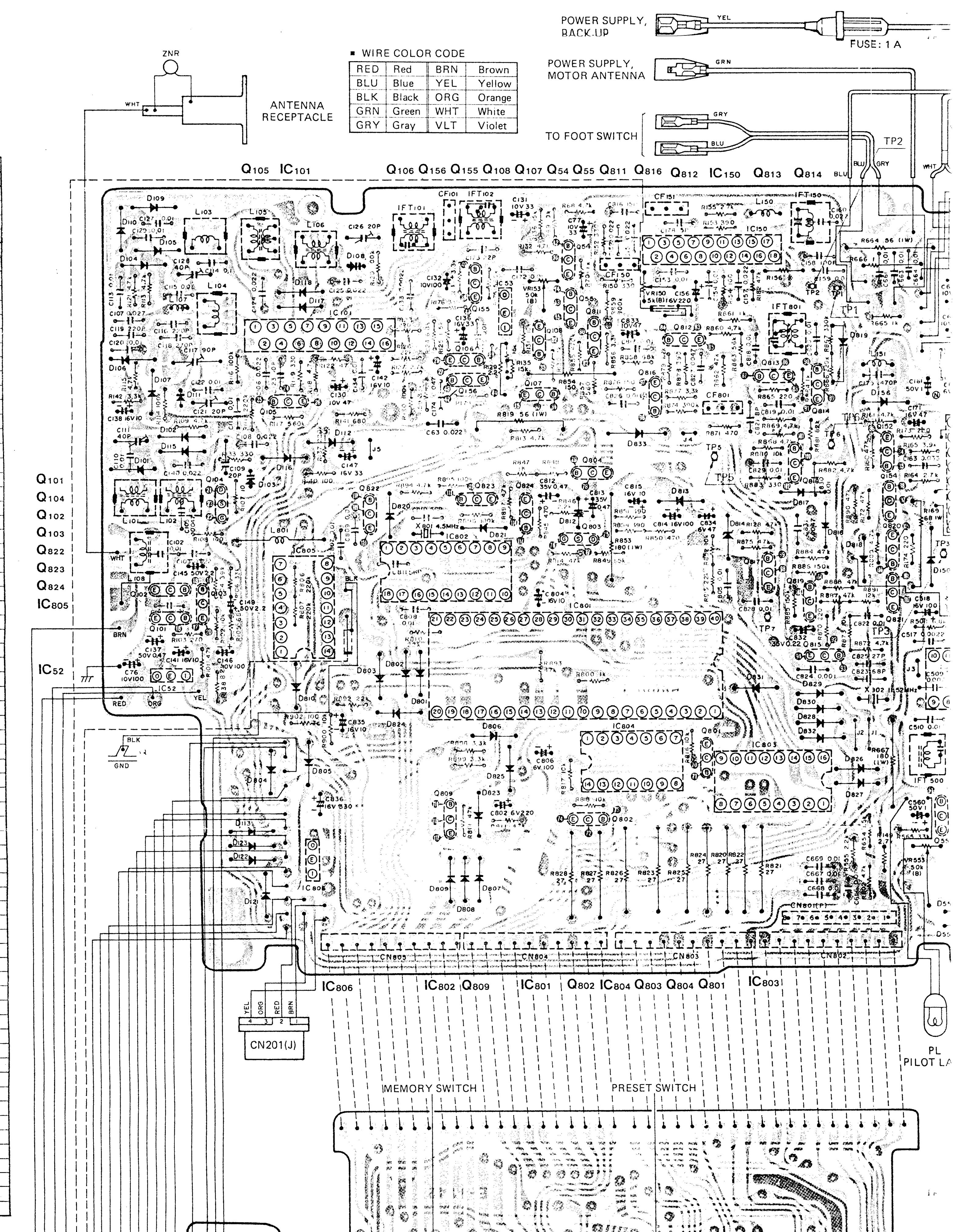
WIRING DIAGRAM/VERDRAHTUNG MODEL CQ-954EG(TAPE, RADIO & TUNER CONTROL BLOCK)

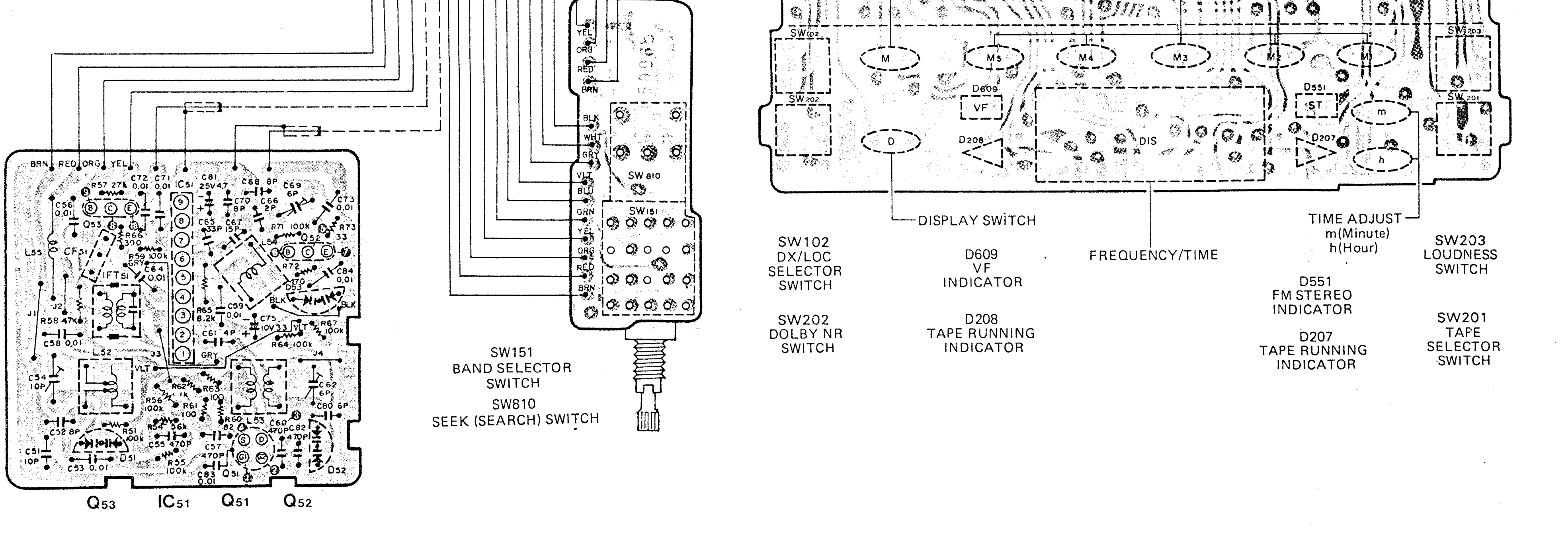
- Chip and conductive side in shown in red.
- Negative side is shown in blue.

NO.	VOLTAGE	NO.	VOLTAGE	PIN.NO	VOLTAGE	PIN NO	VOLTAGE
①	2.8V	(74)	5.0V	(14)	2.0V	(3)	3.2V
②	6.3V	(75)	7.9V	(15)	1.9V	(4)	3.6V
③	6.8V	(76)	1.7V	(16)	5.2V	(5)	3.6V
④	6.8V	(77)	2.2V	IC150		(6)	4.7V
⑤	5.2V	(78)	1.5V	(1)	3.8V	(7)	3.6V
⑥	0.9V	(79)	0V	(2)	3.8V	(8)	3.7V
⑦	0.2V	(80)	8.5V	(3)	3.8V	(9)	2.6V
⑧	6.3V	(81)	8.1V	(4)	0V	(10)	10.6V
⑨	0V	(82)	8.0V	(5)	3.9V	(11)	0.2V
⑩	0V	(83)	8.5V	(6)	2.9V	(12)	9.6V
⑪	0.1V	(84)	4.7V	(7)	2.9V	(13)	9.2V
⑫	0.7V	(85)	4.1V	(8)	2.9V	(14)	2.7V
⑬	13.7V	(86)	8.5V	(9)	4.8V	(15)	2.5V
⑭	13.0V	(87)	4.0V	(10)	11.0V	(16)	2.5V
⑮	13.7V	(88)	3.2V	(11)	4.8V	(17)	1.9V
⑯	0V	(89)	8.5V	(12)	4.1V	(18)	0V
⑰	0V	(90)	4.6V	(13)	4.8V	IC551	
⑱	0.3V	(91)	4.1V	(14)	3.9V	(1)	1.6V
⑲	0.8V	(92)	8.4V	(15)	4.9V	(2)	1.6V
⑳	0.2V	(93)	2.7V	(16)	4.1V	(3)	2.1V
㉑	7.7V	(94)	8.0V	(17)	3.3V	(4)	12.4V
㉒	0V	(95)	2.1V	(18)	0V	(5)	1.3V
㉓	0V	(96)	2.1V	IC151		(6)	0.1V
㉔	4.2V	(97)	8.0V	(1)	8.7V	(7)	1.4V
㉕	0.9V	(98)	8.0V	(2)	2.9V	(8)	0.1V
㉖	0.2V	(99)	0V	(3)	8.6V	(9)	0V
㉗	2.0V	(100)	4.4V	(4)	1.6V	(10)	12.2V
㉘	0V	(101)	0.9V	(5)	7.6V	(11)	2.1V
㉙	1.5V	(102)	0.3V	(6)	6.8V	(12)	0.2V
㉚	13.7V	(103)	4.6V	(7)	13.7V	(13)	2.1V
㉛	13.0V	(104)	0V	(8)	0V	(14)	2.1V
㉜	0.1V	(105)	0V	(9)	0.9V	(15)	2.0V
㉝	0.7V	(106)	0.7V	(10)	2.2V	(16)	2.1V
㉞	8.8V	(107)	0.1V	(11)	2.2V	IC601	
㉟	0V	(108)	0.6V	(12)	4.6V	(1)	2.8V
㊱	0V	(109)	14.0V	(13)	2.1V	(2)	2.8V
㊲	5.2V	(110)	5.7V	(14)	2.1V	(3)	2.8V
㊳	0V	(111)	5.0V	(15)	2.1V	(4)	2.8V
㊴	4.0V	(112)	0V	(16)	0.2V	(5)	2.8V
㊵	1.0V	(113)	0.6V	IC203		(6)	6.4V
㊶	0.4V	(114)	5.0V	(1)	1.3V	(7)	0.5V
㊷	6.2V	(115)	0V	(2)	0.8V	(8)	2.2V
㊸	1.4V	(116)	5.0V	(3)	4.4V	(9)	1.4V
㊹	0.8V	(117)	5.0V	(4)	5.1V	(10)	0V
㊺	0V	PIN NO.	VOLTAGE	(5)	0V	(11)	3.8V
㊻	0.6V	IC51		(6)	11.6V	(12)	0V
㊼	2.9V	(1)	8.8V	(7)	4.4V	(13)	0V
㊽	1.7V	(2)	3.7V	(8)	0.8V	(14)	0.4V
㊾	1.1V	(3)	7.8V	(9)	1.3V	(15)	1.7V
㊿	0.2V	(4)	0.7V	IC202,302		(16)	1.6V
(51)	0.7V	(5)	0V	(1)	4.5V	(17)	2.8V
(52)	0V	(6)	14.4V	(2)	4.6V	(18)	2.8V
(53)	0.6V	(7)	3.8V	(3)	5.1V	(19)	2.8V
(54)	2.8V	(8)	6.4V	(4)	4.5V	(20)	2.8V
(55)	13.9V	(9)	5.0V	(5)	4.5V	(21)	2.1V
(56)	3.6V	IC52,53		(6)	4.7V	(22)	11.4V
(57)	3.0V	(1)	13.7V	(7)	3.9V	IC651	
(58)	1.7V	(2)	0V	(8)	0V	(1)	5.5V
(59)	2.2V	(3)	8.0V	(9)	0V	(2)	5.5V
(60)	1.5V	IC101		(10)	4.5V	(3)	5.0V
(61)	0V	(1)	2.1V	(11)	4.7V	(4)	0V
(62)	0.6V	(2)	2.7V	(12)	4.5V	(5)	4.2V
(63)	4.4V	(3)	5.8V	(13)	0V	(6)	4.3V
(64)	1.4V	(4)	5.8V	(14)	4.6V	(7)	4.3V
(65)	0.7V	(5)	7.5V	(15)	4.5V	(8)	8.5V
(66)	0V	(6)	2.0V	(16)	8.0V	IC806	
(67)	0V	(7)	7.5V	IC303		(1)	10.6V
(68)	0V	(8)	7.5V	(1)	14.1V	(2)	0V
(69)	0V	(9)	4.0V	(2)	0V	(3)	5.0V
(70)	3.8V	(10)	0V	(3)	8.0V		
(71)	0.2V	(11)	7.9V	IC500			
(72)	2.8V	(12)	0.7V	(1)	3.9V		
(73)	4.8V	(13)	7.9V	(2)	3.2V		

- WIRE COLOR CODE

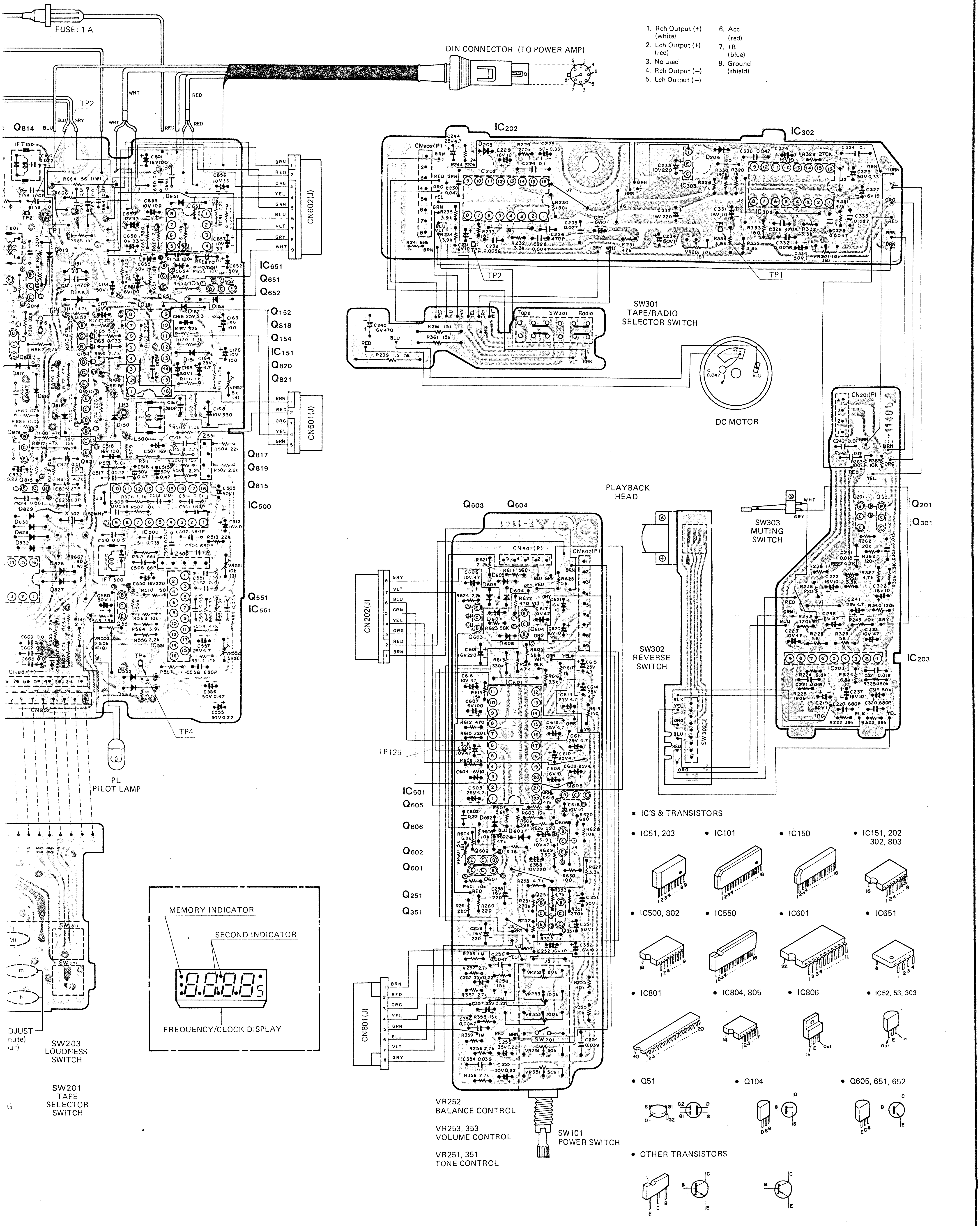
RED	Red	BRN	Brown
BLU	Blue	YEL	Yellow
BLK	Black	ORG	Orange
GRN	Green	WHT	White
GRY	Gray	VLT	Violet


POWER SUPPLY, BACK-UP
YEL
FUSE: 1 A
POWER SUPPLY, MOTOR ANTENNA
GRN
TO FOOT SWITCH
GRY
BLU
TP2
ZNR
WHT
ANTENNA RECEPTACLE
Q105 IC101
Q106 Q156 Q155 Q108 Q107 Q54 Q55 Q811 Q816 Q812 IC150 Q813 Q814
Q101
Q104
Q102
Q103
Q822
Q823
Q824
IC805
IC52
BRN
RED
ORG
YEL
BLK
GND
IC806
IC802 Q809
IC801 Q802 IC804 Q803 Q804 Q801
IC803
CN201(J)
PL
PILOT LA
MEMORY SWITCH
PRESET SWITCH
IC802
IC801
IC804
IC803
CN803
CN804
CN801
CN802


SW102
SW202
SW203
SW201
M
M5
M4
M3
M2
M1
D609
VF
D551
ST
D
D208
DIS
D207
m
h
SW810
SW151
YEL
ORG
RED
BRN
BLK
WHT
GRY
VLT
GRN
DISPLAY SWITCH
TIME ADJUST
m(Minute)
h(Hour)
SW102
DX/LOC
SELECTOR
SWITCH
SW202
DOLBY NR
SWITCH
D609
VF
INDICATOR
D208
TAPE RUNNING
INDICATOR
FREQUENCY/TIME
D551
FM STEREO
INDICATOR
D207
TAPE RUNNING
INDICATOR
SW203
LOUDNESS
SWITCH
SW201
TAPE
SELECTOR
SWITCH
SW151
BAND SELECTOR
SWITCH
SW810
SEEK (SEARCH) SWITCH
BRN
RED
ORG
YEL
Q53
IC51
Q51
Q52

Mar., 1981

OL BLOCK)


FUSE: 1 A
DIN CONNECTOR (TO POWER AMP)
1. Rch Output (+) (white)
2. Lch Output (+) (red)
3. No used
4. Rch Output (−)
5. Lch Output (−)
6. Acc (red)
7. +B (blue)
8. Ground (shield)
TP2
Q814
WHT
RED
BLU
GRY
CN602(J)
CN601(J)
IC651
Q651
Q652
Q152
Q818
Q154
IC151
Q820
Q821
Q817
Q819
Q815
IC500
Q551
IC551
TP1
TP3
TP4
CN801(P)
CN802
PL
PILOT LAMP
IC202
IC302
IC303
CN202(P)
SW301
TAPE/RADIO SELECTOR SWITCH
Tape
Radio
DC MOTOR
CN201(P)
PLAYBACK HEAD
SW303
MUTING SWITCH
Q201
Q301
SW302
REVERSE SWITCH
IC203
Q603
Q604
CN601(P)
CN602(P)
CN202(J)
TP125
IC601
Q605
Q606
Q602
Q601
Q251
Q351
CN801(J)
SW701
VR252
BALANCE CONTROL
VR253, 353
VOLUME CONTROL
VR251, 351
TONE CONTROL
SW101
POWER SWITCH
MEMORY INDICATOR
SECOND INDICATOR
FREQUENCY/CLOCK DISPLAY
SW203
LOUDNESS SWITCH
SW201
TAPE SELECTOR SWITCH
DJUST
nute)
our)
■ IC'S & TRANSISTORS
• IC51, 203
• IC101
• IC150
• IC151, 202, 302, 803
• IC500, 802
• IC550
• IC601
• IC651
• IC801
• IC804, 805
• IC806
• IC52, 53, 303
• Q51
• Q104
• Q605, 651, 652
• OTHER TRANSISTORS
E C B
D S G
Out E In
In E Out

CASSETTE CAR STEREO w/LW/MW/FM MPX ELECTRONIC TUNER RADIO

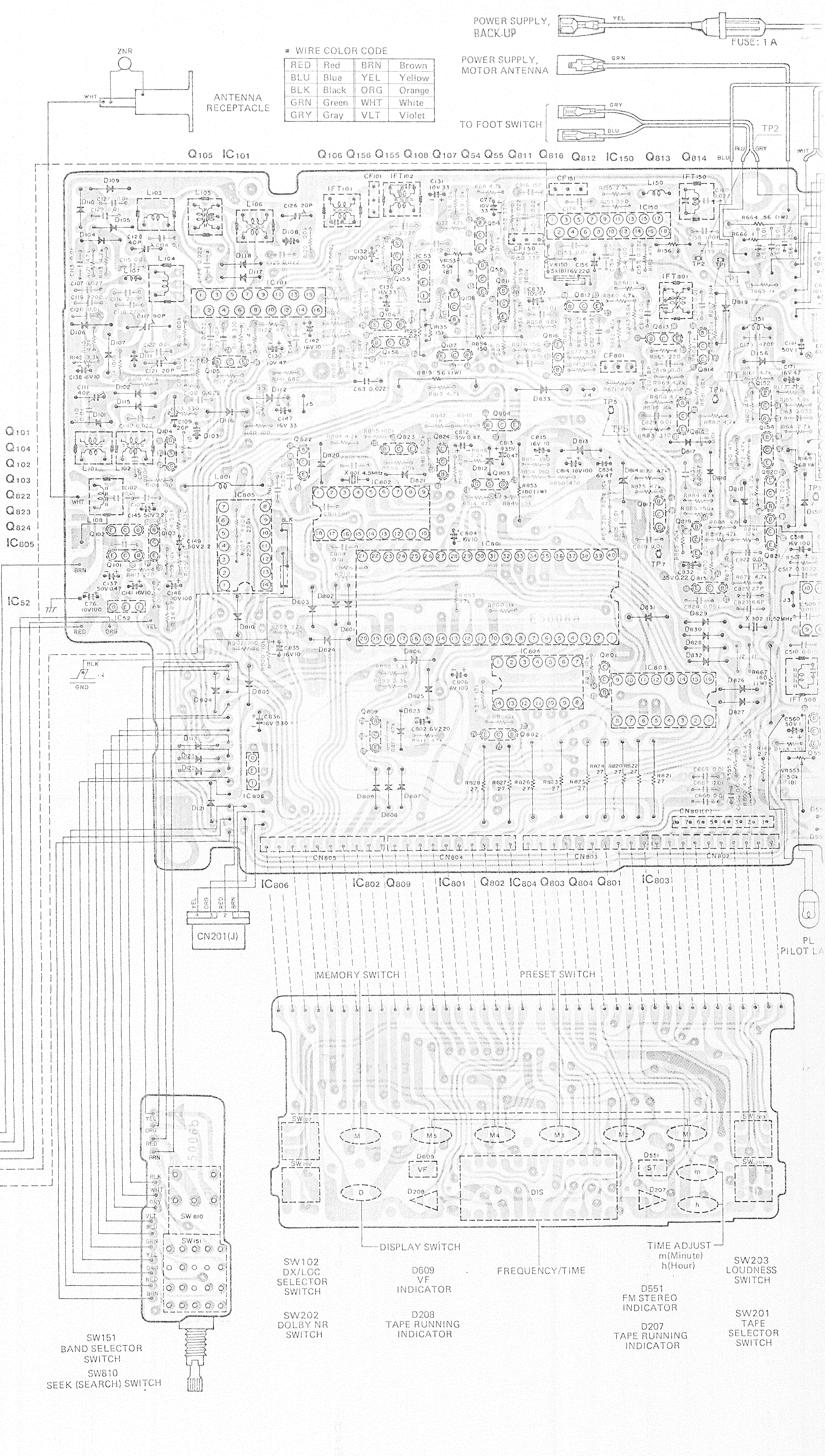
WIRING DIAGRAM/VERDRAHTUNG MODEL CQ-954EG(TAPE, RADIO & TUNER CONTROL BLOCK)

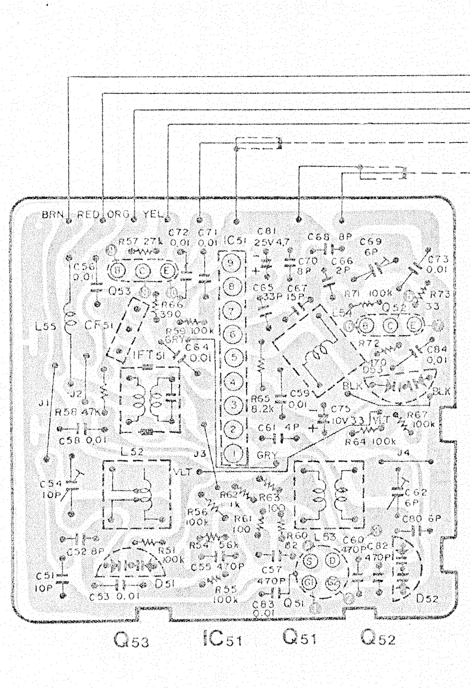
※ WIRE COLOR CODE

RED	Red	BRN	Brown
BLU	Blue	YEL	Yellow
BLK	Black	ORG	Orange
GRN	Green	WHT	White
GRY	Gray	VLT	Violet

※ Chip and conductive side in shown in red.
※ Negative side is shown in blue.

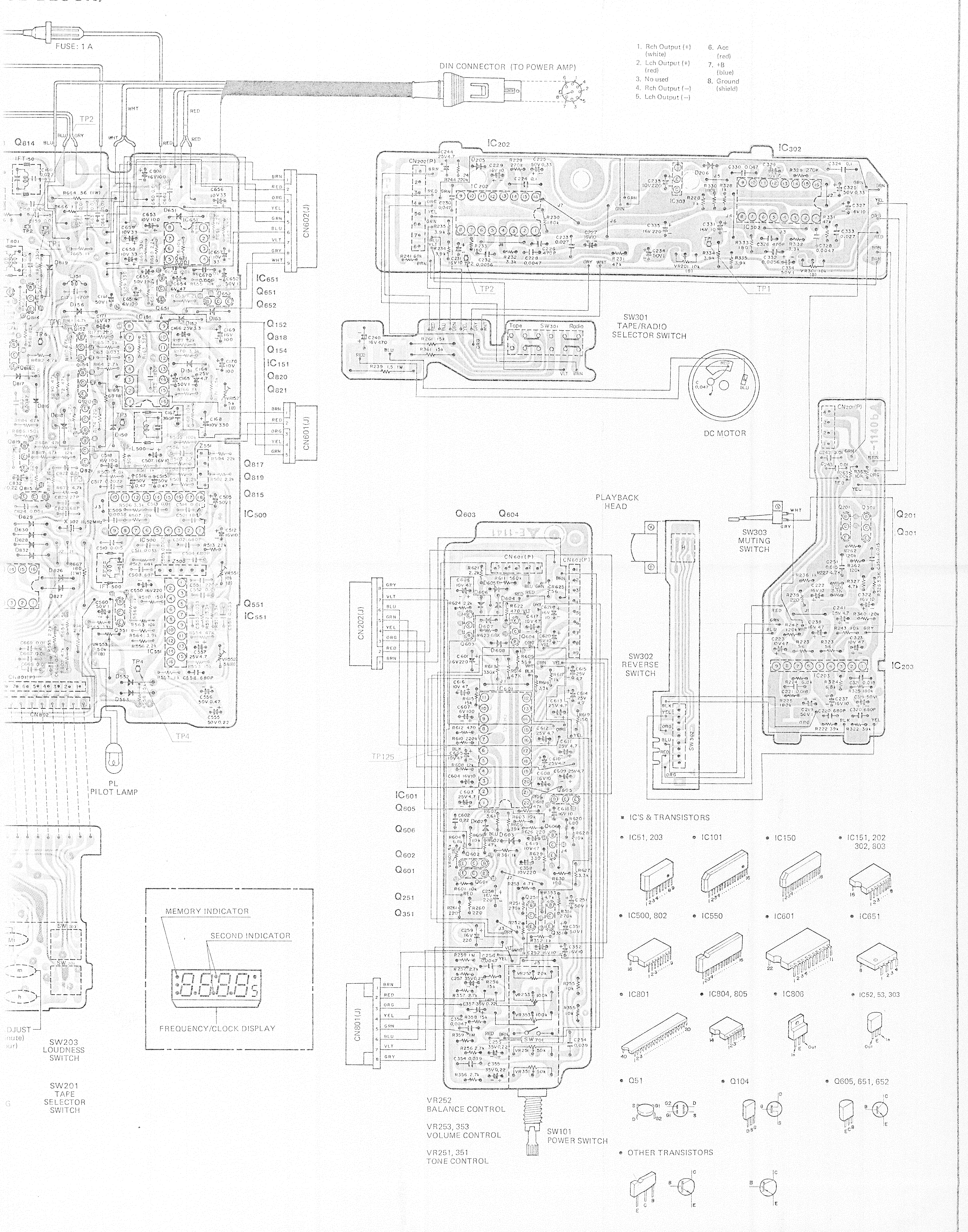
NO.	VOLTAGE	NO.	VOLTAGE	PIN.NO.	VOLTAGE	PIN.NO.	VOLTAGE
①	2.8V	(74)	5.0V	⑭	2.0V	③	3.2V
②	6.3V	(75)	7.9V	⑮	1.9V	④	3.6V
③	6.8V	(76)	1.7V	⑯	5.2V	⑤	3.6V
④	6.8V	(77)	2.2V	IC150		⑥	4.7V
⑤	5.2V	(78)	1.5V	①	3.8V	⑦	3.6V
⑥	0.9V	(79)	0V	②	3.8V	⑧	3.7V
⑦	0.2V	(80)	8.5V	③	3.8V	⑨	2.6V
⑧	6.3V	(81)	8.1V	④	0V	⑩	10.6V
⑨	0V	(82)	8.0V	⑤	3.9V	⑪	0.2V
⑩	0V	(83)	8.5V	⑥	2.9V	⑫	9.6V
⑪	0.1V	(84)	4.7V	⑦	2.9V	⑬	9.2V
⑫	0.7V	(85)	4.1V	⑧	2.9V	⑭	2.7V
⑬	13.7V	(86)	8.5V	⑨	4.8V	⑮	2.5V
⑭	13.0V	(87)	4.0V	⑩	11.0V	⑯	2.5V
⑮	13.7V	(88)	3.2V	⑪	4.8V	⑰	1.9V
⑯	0V	(89)	8.5V	⑫	4.1V	⑱	0V
⑰	0V	(90)	4.6V	⑬	4.8V	IC551	
⑱	0.3V	(91)	4.1V	⑭	3.9V	①	1.6V
⑲	0.8V	(92)	8.4V	⑮	4.9V	②	1.6V
⑳	0.2V	(93)	2.7V	⑯	4.1V	③	2.1V
㉑	7.7V	(94)	8.0V	⑰	3.3V	④	12.4V
㉒	0V	(95)	2.1V	⑱	0V	⑤	1.3V
㉓	0V	(96)	2.1V	IC151		⑥	0.1V
㉔	4.2V	(97)	8.0V	①	8.7V	⑦	1.4V
㉕	0.9V	(98)	8.0V	②	2.9V	⑧	0.1V
㉖	0.2V	(99)	0V	③	8.6V	⑨	0V
㉗	2.0V	(100)	4.4V	④	1.6V	⑩	12.2V
㉘	0V	(101)	0.9V	⑤	7.6V	⑪	2.1V
㉙	1.5V	(102)	0.3V	⑥	6.8V	⑫	0.2V
㉚	13.7V	(103)	4.6V	⑦	13.7V	⑬	2.1V
㉛	13.0V	(104)	0V	⑧	0V	⑭	2.1V
㉜	0.1V	(105)	0V	⑨	0.9V	⑮	2.0V
㉝	0.7V	(106)	0.7V	⑩	2.2V	⑯	2.1V
㉞	8.8V	(107)	0.1V	⑪	2.2V	IC601	
㉟	0V	(108)	0.6V	⑫	4.6V	①	2.8V
㊱	0V	(109)	14.0V	⑬	2.1V	②	2.8V
㊲	5.2V	(110)	5.7V	⑭	2.1V	③	2.8V
㊳	0V	(111)	5.0V	⑮	2.1V	④	2.8V
㊴	4.0V	(112)	0V	⑯	0.2V	⑤	2.8V
㊵	1.0V	(113)	0.6V	IC203		⑥	6.4V
㊶	0.4V	(114)	5.0V	①	1.3V	⑦	0.5V
㊷	6.2V	(115)	0V	②	0.8V	⑧	2.2V
㊸	1.4V	(116)	5.0V	③	4.4V	⑨	1.4V
㊹	0.8V	(117)	5.0V	④	5.1V	⑩	0V
㊺	0V	PIN.NO.	VOLTAGE	⑤	0V	⑪	3.8V
㊻	0.6V	IC51		⑥	11.6V	⑫	0V
㊼	2.9V	①	8.8V	⑦	4.4V	⑬	0V
㊽	1.7V	②	3.7V	⑧	0.8V	⑭	0.4V
㊾	1.1V	③	7.8V	⑨	1.3V	⑮	1.7V
㊿	0.2V	④	0.7V	IC202,302		⑯	1.6V
(51)	0.7V	⑤	0V	①	4.5V	⑰	2.8V
(52)	0V	⑥	14.4V	②	4.6V	⑱	2.8V
(53)	0.6V	⑦	3.8V	③	5.1V	⑲	2.8V
(54)	2.8V	⑧	6.4V	④	4.5V	⑳	2.8V
(55)	13.9V	⑨	5.0V	⑤	4.5V	㉑	2.1V
(56)	3.6V	IC52,53		⑥	4.7V	㉒	11.4V
(57)	3.0V	①	13.7V	⑦	3.9V	IC651	
(58)	1.7V	②	0V	⑧	0V	①	5.5V
(59)	2.2V	③	8.0V	⑨	0V	②	5.5V
(60)	1.5V	IC101		⑩	4.5V	③	5.0V
(61)	0V	①	2.1V	⑪	4.7V	④	0V
(62)	0.6V	②	2.7V	⑫	4.5V	⑤	4.2V
(63)	4.4V	③	5.8V	⑬	0V	⑥	4.3V
(64)	1.4V	④	5.8V	⑭	4.6V	⑦	4.3V
(65)	0.7V	⑤	7.5V	⑮	4.5V	⑧	8.5V
(66)	0V	⑥	2.0V	⑯	8.0V	IC806	
(67)	0V	⑦	7.5V	IC303		①	10.6V
(68)	0V	⑧	7.5V	①	14.1V	②	0V
(69)	0V	⑨	4.0V	②	0V	③	5.0V
(70)	3.8V	⑩	0V	③	8.0V		
(71)	0.2V	⑪	7.9V	IC500			
(72)	2.8V	⑫	0.7V	①	3.9V		
(73)	4.8V	⑬	7.9V	②	3.2V		


POWER SUPPLY, BACK-UP
YEL
FUSE: 1A
POWER SUPPLY, MOTOR ANTENNA
GRN
TO FOOT SWITCH
GRY
BLU
TP2
ZNR
WHT
ANTENNA RECEPTACLE
Q105 IC101 Q106 Q156 Q155 Q108 Q107 Q54 Q55 Q811 Q816 Q812 IC150 Q813 Q814
Q101
Q104
Q102
Q103
Q822
Q823
Q824
IC805
IC52
BRN
RED
ORG
YEL
BLK
GND
CN805
CN804
CN803
CN802
IC806 IC802 Q809 IC801 Q802 IC804 Q803 Q804 Q801 IC803
YEL ORG RED BRN
CN201(J)
PL
PILOT LA
MEMORY SWITCH
PRESET SWITCH
M6 M5 M4 M3 M2 M1
VF
ST
D
DIS
m
h
SW102
SW202
SW203
SW201
SW810
SW151
DISPLAY SWITCH
SW102 DX/LOC SELECTOR SWITCH
SW202 DOLBY NR SWITCH
D609 VF INDICATOR
D208 TAPE RUNNING INDICATOR
FREQUENCY/TIME
TIME ADJUST m(Minute) h(Hour)
D551 FM STEREO INDICATOR
D207 TAPE RUNNING INDICATOR
SW203 LOUDNESS SWITCH
SW201 TAPE SELECTOR SWITCH
SW151 BAND SELECTOR SWITCH
SW810 SEEK (SEARCH) SWITCH


BRN RED ORG YEL
Q53 IC51 Q51 Q52

Mar., 1981

OL BLOCK)


FUSE: 1 A
DIN CONNECTOR (TO POWER AMP)
1. Rch Output (+) (white)
2. Lch Output (+) (red)
3. No used
4. Rch Output (−)
5. Lch Output (−)
6. Acc (red)
7. +B (blue)
8. Ground (shield)
TP2
Q814
IC202
IC302
IC651
Q651
Q652
Q152
Q818
Q154
IC151
Q820
Q821
CN602(J)
CN601(J)
Q817
Q819
Q815
IC500
Q551
IC551
CN802
TP4
PL
PILOT LAMP
SW301
TAPE/RADIO
SELECTOR SWITCH
TP1
DC MOTOR
PLAYBACK
HEAD
Q603
Q604
SW303
MUTING
SWITCH
Q201
Q301
SW302
REVERSE
SWITCH
IC203
CN202(J)
TP125
IC601
Q605
Q606
Q602
Q601
Q251
Q351
CN801(J)
MEMORY INDICATOR
SECOND INDICATOR
FREQUENCY/CLOCK DISPLAY
ADJUST
SW203
LOUDNESS
SWITCH
SW201
TAPE
SELECTOR
SWITCH
VR252
BALANCE CONTROL
VR253, 353
VOLUME CONTROL
VR251, 351
TONE CONTROL
SW101
POWER SWITCH
IC'S & TRANSISTORS
IC51, 203
IC101
IC150
IC151, 202, 302, 803
IC500, 802
IC550
IC601
IC651
IC801
IC804, 805
IC806
IC52, 53, 303
Q51
Q104
Q605, 651, 652
OTHER TRANSISTORS

CASSETTE CAR STEREO w/LW/MW/FM MPX ELECTRONIC TUNER RADIO

ALIGNMENT INSTRUCTIONS (RADIO BLOCK)

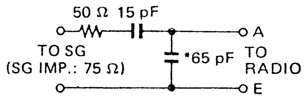
■ EQUIPMENT REQUIRED

● Signal Generator:	AM: 150 ~ 1700 kHz, 400 Hz Mod. @30% FM: 10.7 MHz, 86 ~ 110 MHz, 400 Hz Mod. @30% and Stereo Signal Generator
● Sweep Generator:	450 kHz, 10.7 MHz
● Antenna Pad:	Refer to Fig. 1 & 2.
● Indicator:	Output meter (AC voltmeter) VTVM Oscilloscope Frequency counter
● Power Supply Voltage:	DC 14.4 V (standard voltage for measurement)

- Connect this unit to a Power Amplifier.

AM I-F & FM I-F ALIGNMENT USING SWEEP GENERATOR

- Set Volume Control at maximum, and Tone Control in the treble position.
- Set Balance Control in center.
- Set Display Switch in the OFF position.
- Set DX/LOCAL Selector Switch in the DX position.
- Connect the signal generator to the antenna receptacle through the antenna pad. (Fig. 1 & 2)
- Keep the signal generator output low enough to prevent overloading the circuit.



*Includes feeder capacitor.

Fig. 1 Antenna Pad

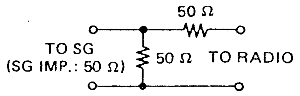


Fig. 2 Antenna Pad

	STEP	GENERATOR FREQUENCY	BAND SELECTOR SETTING	DISPLAY FREQUENCY	SIGNAL FEED POINT	INDICATOR CONNECTION	ADJUST	REMARKS
AM I-F	❶ ~ ❷	900 kHz [Un-modulated or 400 Hz Mod.]	AM (MW)	900 kHz	Through pad (Fig. 1) to antenna receptacle.	VTVM between Test point ⑤ and ground	IFT102 IFT101	Adjust for maximum.
FM I-F	❸ ~ ❹	95.1 MHz [Un-modulated or 400 Hz Mod.]	FM (UKW)	95.1 MHz	Through pad (Fig. 2) to antenna receptacle.	VTVM between Test point ② and ground	IFT51 IFT150	Adjust for maximum amplitude and proper linearity between ±100 kHz makers.

- Repeat steps, two or three times.

VARACTOR VOLTAGE ALIGNMENT USING VTVM

- Volume, Tone and Balance Control may be left in any position.
- No signal input during this alignment.

	STEP	DISPLAY FREQUENCY	RADIO SELECTOR SETTING	INDICATOR CONNECTION	ADJUST	REMARKS
VARACTOR	❺	155 kHz	LW	VTVM between Test point ⑧ and ground	L103	Adjust for 1.2 V reading on VTVM
	❻	281 kHz	"	"	C117	Adjust for 5.0 V reading on VTVM
	❼	531 kHz	MW	"	L104	Adjust for 1.2 V reading on VTVM
	❽	1602 kHz	"	"	C121	Adjust for 8.8 V reading on VTVM
	❾	87.5 MHz	FM (UKW)	"	L54	Adjust for 1.5 V reading on VTVM
	❿	104.0 MHz	"	"	C69	Adjust for 8 V reading on VTVM

- Repeat steps, two or three times.

AM/FM RF ALIGNMENT USING SIGNAL GENERATOR

- Set Volume Control at maximum, and Tone Control in the treble position.
- Set Balance Control in center.
- Set DX/LOCAL Selector Switch in the DX position.
- Connect the signal generator to the antenna receptacle through the antenna pad. (Fig. 1 or Fig. 2)
- Keep the signal generator output low enough to prevent overloading the circuit.

	STEP	GENERATOR FREQUENCY	RADIO SELECTOR SETTING	DISPLAY FREQUENCY	SIGNAL FEED POINT	INDICATOR CONNECTION	ADJUST	REMARKS
AM RF	⓫	164 kHz [400 Hz Mod.]	LW	164 kHz	Through pad (Fig. 1) to antenna receptacle	Output meter across speaker terminals	L101 L106	Adjust for maximum
	⓬	263 kHz [400 Hz Mod.]	"	263 kHz	"	"	C111 C128	"
	⓭	603 kHz [400 Hz Mod.]	MW	603 kHz	"	"	L102 L105	"
	⓮	1404 kHz [400 Hz Mod.]	"	1404 kHz	"	"	C109 C126	"
FM RF	⓯	88.1 MHz [400 Hz Mod.]	FM (UKW)	88.1 MHz	Through pad (Fig. 2) to antenna receptacle	"	L52 L53	"
	⓰	104.0 MHz [400 Hz Mod.]	"	104.0 MHz	"	"	C54 C62	"

SERACH TRIGGER ALIGNMENT USING SIGNAL GENERATOR

- Set Volume Control at maximum, and Tone Control in the treble position.
- Connect the signal generator to the antenna receptacle through the antenna pad (Fig. 2).
- Keep the signal generator output to 54 dB.

	STEP	GENERATOR FREQUENCY	RADIO SELECTOR SETTING	DISPLAY FREQUENCY	SIGNAL FEED POINT	INDICATOR CONNECTION	ADJUST	REMARKS
Ser.	⓱	98.1 MHz [Unmodulated]	FM (UKW)	98.1 MHz	Through pad (Fig. 2) to antenna receptacle	Output meter across speaker terminals.	IFT801	Adjust for maximum

SEARCH SENSITIVITY ALIGNMENT USING SIGNAL GENERATOR

- Volume, Tone and Balance Control may be left in any position.
- Connect the signal generator to the antenna receptacle through the antenna pad (Figs. 1 & 2).

	STEP	GENERATOR FREQUENCY	RADIO SELECTOR SETTING	SIGNAL FEED POINT	ADJUST	REMARKS
AM Ser.	⓲	999 kHz [400 Hz Mod.] 30 dB/μV input in DX	MW	Through pad (Fig. 1) to antenna receptacle	VR153	Adjust VR153 to search the input signal.
FM Ser.	⓳	98.1 MHz [400 Hz Mod.] 18 dB/μV input	FM (UKW)	Through pad (Fig. 2) to antenna receptacle	VR150	Adjust VR150 to search the input signal.

- Repeat steps, two or three times.

FM ELECTRONIC INTERFERENCE ABSORPTION CIRCUIT ALIGNMENT USING SIGNAL GENERATOR AND PULSE GENERATOR

- Set Band Selector in the FM (UKW) position.
- Connect the signal generator and the pulse generator to the antenna receptacle through the two-signal antenna pad.

Signal generator:	Frequency	98.1 MHz (400 Hz Mod.)
	Dev. 19 kHz pilot signal	7.5 kHz
	Main signal	22.25 kHz
	Output level	30 ~ 40 dB/μV
Pulse generator:	Rising time	5 ~ 10 μsec.
	Width	40 μsec.
	Interval	1 kHz
	Level	+5 Vp-p

- Firstly set Radio Dial to the signal, and the output level of signal generator to 30 dB/μV.
- Nextly cut the modulation level and Volume Control to maximum.

	STEP	MODULATION FREQUENCY	INDICATOR	ADJUST	REMARKS
EIA	⑳	98.1 MHz [Unmodulated]	VTVM to the speaker terminals.	L500 IFT500	Adjust for minimum noise level.

FM MPX ALIGNMENT USING SIGNAL GENERATOR & STEREO SIGNAL GENERATOR

- Set Volume Control at maximum, and Tone Control in the treble position.
- Set Balance Control in center.
- Set DX/LOCAL Selector Switch in the DX position.
- Connect the signal generator to the antenna receptacle through the antenna pad. (Fig. 2)
- Keep the signal generator output low enough to prevent overloading the circuit.

	STEP	GENERATOR FREQUENCY	RADIO SELECTOR SETTING	INDICATOR CONNECTION	ADJUST	REMARKS
FM	㉑	no signal input	FM (UKW)	Frequency counter to Test point ④ and ground	VR552	Adjust to 19 kHz ±30 Hz
MPX	㉒	89.9 MHz [400 Hz Mod. Left Ch] 60 dB/μV input	"	Output meter across right speaker terminals	VR551	Adjust for minimum.
		89.9 MHz [400 Hz Mod. Right Ch] 60 dB/μV input		Output meter across left speaker terminals		Adjust for minimum.

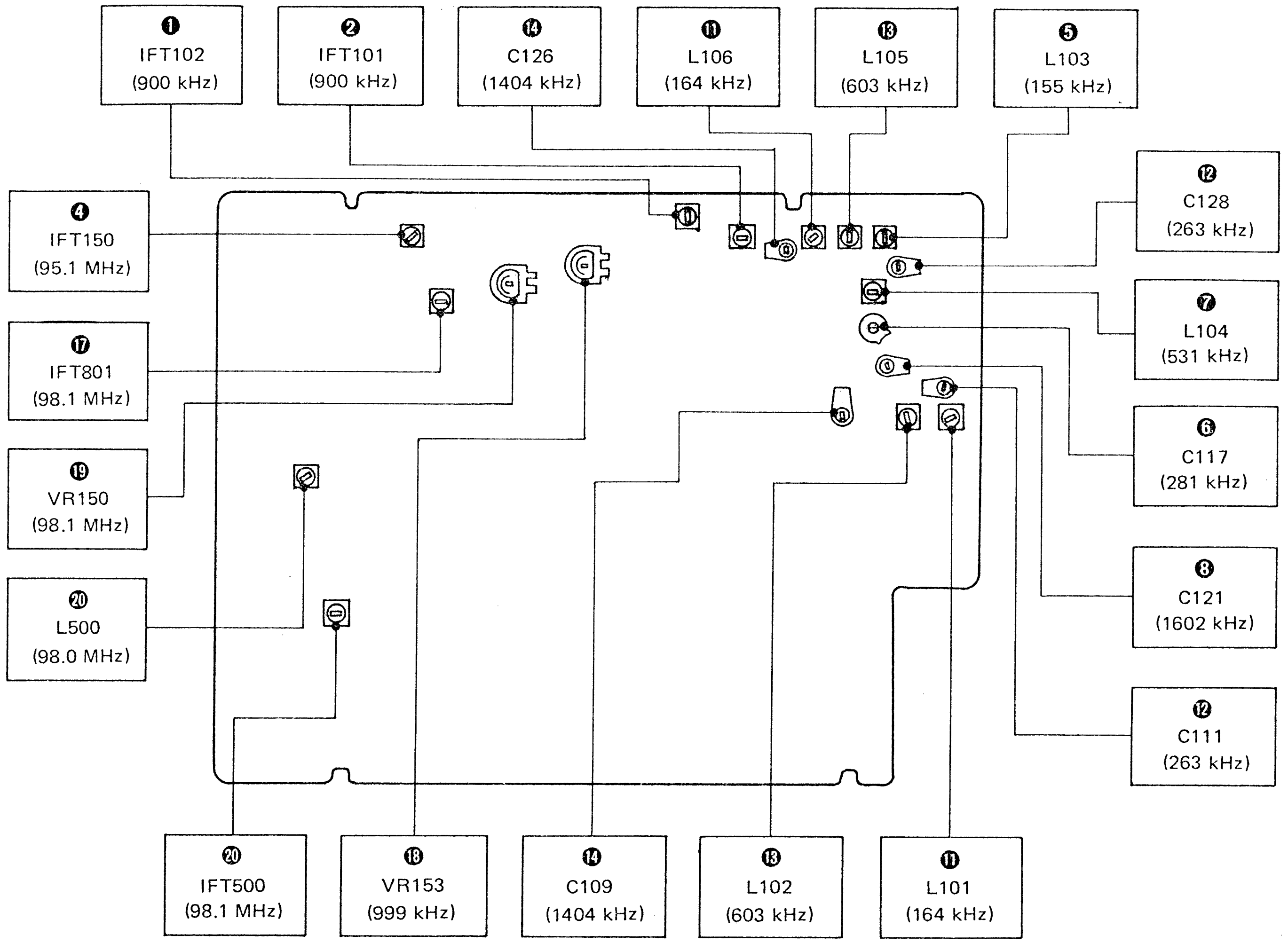
- Repeat steps, two or three times.

SK/DK ALIGNMENT USING FREQUENCY COUNTER

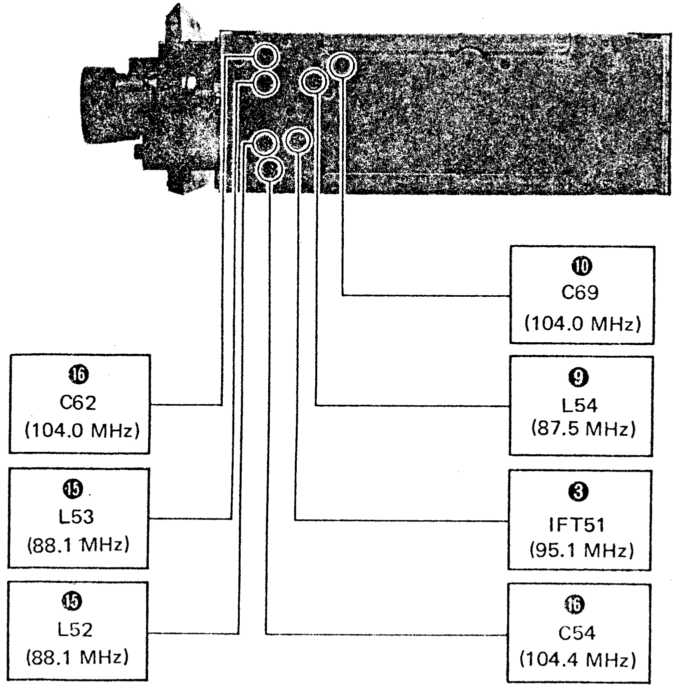
- Volume, Tone and Balance Control may be left in any position.
- Ground the TP1 for easy-alignment.

	STEP	GENERATOR FREQUENCY	RADIO SELECTOR SETTING	INDICATOR CONNECTION	ADJUST	REMARKS
SK	㉓	no signal input	VF	Frequency counter to Test point ③ and ground	VR152	Adjust to 57 kHz ±100 Hz
DK	㉔	"	"	Frequency counter to TP125 and ground.	VR601	Adjust to 125 kHz ±0.5 kHz

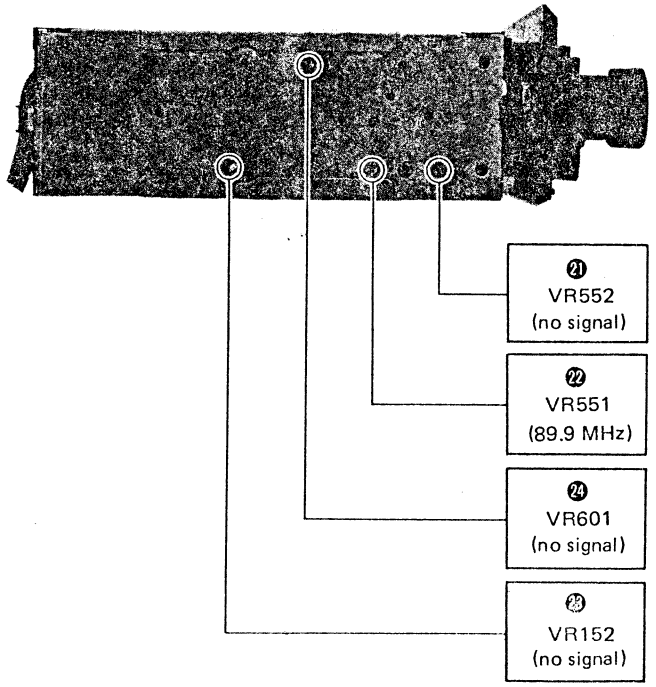
ALIGNMENT POINTS/ABGLEICHSTELLEN (RADIO BLOCK)


❶ IFT102 (900 kHz)
❷ IFT101 (900 kHz)
⓮ C126 (1404 kHz)
⓫ L106 (164 kHz)
⓭ L105 (603 kHz)
❺ L103 (155 kHz)
⓬ C128 (263 kHz)
❼ L104 (531 kHz)
❻ C117 (281 kHz)
❽ C121 (1602 kHz)
⓬ C111 (263 kHz)
❹ IFT150 (95.1 MHz)
⓱ IFT801 (98.1 MHz)
⓳ VR150 (98.1 MHz)
⓴ L500 (98.0 MHz)
⓴ IFT500 (98.1 MHz)
⓲ VR153 (999 kHz)
⓮ C109 (1404 kHz)
⓭ L102 (603 kHz)
⓫ L101 (164 kHz)

RIGHT SIDE VIEW


❿ C69 (104.0 MHz)
⓰ C62 (104.0 MHz)
❾ L54 (87.5 MHz)
⓯ L53 (88.1 MHz)
❸ IFT51 (95.1 MHz)
⓯ L52 (88.1 MHz)
⓰ C54 (104.4 MHz)

LEFT SIDE VIEW


㉑ VR552 (no signal)
㉒ VR551 (89.9 MHz)
㉔ VR601 (no signal)
㉓ VR152 (no signal)

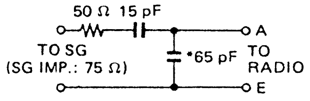
ABGLEICH-ANLEITUNG
(RADIO BLOCK)

■ **ERFORDERLICHE MESSGERÄTE**

- Meßsender: AM-MW 150 ~1700 kHz, 400 Hz Modulation, Modulationsgrad 30%
  FM-UKW 10.7 MHz, 86 ~110 MHz, Modulationsgrad 30% und Stereo-Signalgenerator
- Wobbelsender: 450 kHz, 10.7 MHz
- Ersatzantenne: siehe Abb. 1, 2.
- Anzeigeinstrumente: Ausgangsleistungsmesser (Wechselstromspannungsmesser)
  Röhrenspannungsmesser
  Oszillograph
  Frequenzzähler
- Stromspannung: 14.4 V Gleichstrom (Normspannung für Messungen)
- Das Einheit an Leistungsversärker koppeln.

ABGLEICH VON AM-ZF UND FM (UKW)-ZF MIT WOBBELSENDER

- Lautstärkeregler auf Maximum und Klangregler auf Hochton stellen.
- Balanceregler auf Mitte stellen.
- DX/LOCAL Wahlschalter auf DX stellen.
- Meßsender über Ersatzantenne (Abb. 1 oder 2) an Antennensteckdose koppeln.
- Ausgangsleistung des Meßsenders klein genug einstellen um Uberbelastung der Schaltkreise zu vermeiden.



*Includes feeder capacitor.

Abb. 1 Antennen satz

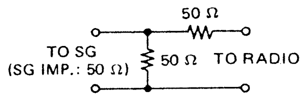


Abb. 2 Antennen satz

	Stufe	Meßsender-frequenz	Stellung des Wellenbereich-umschalters	Schaustellung frequenz	Ankopplung des Meßsenders	Anschluß des Anzeigeinstruments	Abgleich	Anmerkung
AM ZF	❶ ~ ❷	900 kHz [unmoduliert oder 400 Hz Mod.]	AM(MW)	900 kHz	Über Ersatzantenne (Abb. 1) an die Antennensteckdose	Zwischen Punkt ⑤ und Erdung oder an Lautsprecheranschlusse	IFT102 IFT101	Auf Maximum stellen
FM ZF	❸ ~ ❹	95.1 MHz [unmoduliert oder 400 Hz Mod.]	FM (UKW)	95.1 MHz	Über Ersatzantenne (Abb. 2) an Antennensteckdose	Vertikalverstärker des Oszillographen zwischen Punkt ② und Erdung anschileßen	IFT51 IFT150	Auf maximale Amplitude vorgeschriebene Liniarität zwischen ±100 kHz Marken stellen.

- Die angegebenen Stufen zwei-bis dreimal wiederholen.

VARACTOR (Voltampere) ABGLEICH MIT VTVM

- Lautstärke-, Klang- und Balanceregler auf believer Stelle stechen lassen.
- Während dieses Abgleichs wird kein Signal engegeben.

	Stufe	Schaustellung frequenz	Stellung des Wellenbereich-umschalters	Anschluß des Anzeigeninstruments	Abgleich	Anmerkung
VARACTOR	❺	155 kHz	LW	Röhrenvoltmeter zwischen Testpunkt ⑧ und Erdung	L103	Auf 1.2 V stellen.
	❻	281 kHz	"	"	C117	Auf 5.0 V stellen.
	❼	531 kHz	MW	"	L104	Auf 1.2 V stellen.
	❽	1602 kHz	"	"	C121	Auf 8.8 V stellen.
	❾	87.5 MHz	FM (UKW)	"	L54	Auf 1.5 V stellen.
	❿	104.0 MHz	"	"	C69	Auf 8 V stellen.

- Die angegebenen Stufen zwei-bis dreimal wiederholen.

ABGLEICH VON AM/FM-IF MIT MESSENDER

- Lautstärkeregler auf Maximum und Klangregler auf Hochton stellen.
- Balanceregler auf Mitte stellen.
- DX/LOCAL Wahlschalter auf DX stellen.
- Meßsender über Ersatzantenne (Abb. 1 oder 2) an Antennensteckdose koppeln.
- Ausgangsleistung des Meßsenders klein genung einstellen, um Uberbelastung der Schaltkreise zu vermeiden.

	Stufe	Meßsender frequenz	Stellung des Wellenbereich-unschalters	Schaustellung frequenz	Ankopplung des Meßsenders	Anschluß des Anzeigeninstruments	Abgleich	Anmerkung
AM HF	⓫	164 kHz [400 Hz Mod.]	LW	164 kHz	Über Ersatzantenne (Abb. 1) an die Antennensteckdose	Ausgansleistungsmesser an Lautsprecheranschlüsse	L101 L106	Auf Maximum stellen
	⓬	263 kHz [400 Hz Mod.]	"	263 kHz	"	"	C111 C128	"
	⓭	603 kHz [400 Hz Mod.]	MW	603 kHz	"	"	L102 L105	"
	⓮	1404 kHz [400 Hz Mod.]	"	1404 kHz	"	"	C109 C126	"
FM HF	⓯	88.1 MHz [400 Hz Mod.]	FM (UKW)	88.1 MHz	Über Ersatzantenne (Abb. 2) an die Antennensteckdose	"	L52 L53	"
	⓰	104.0 MHz [400 Hz Mod.]	"	104.0 MHz	"	"	C54 C62	"

ABGLEICH VON SUCHERAUSLOSER MIT MESSENDER

- Lautstärkeregler auf Maximum und Klangregler auf Hochton stellen.
- Meßsender über Ersatzantenne (Abb. 2) an Antennenstockdose koppeln.
- Ausgangspegel des Meßsender auf 54 dB steuern.

	Stufe	Meßsender-frequenz	Stellung des Wellenbereich-umschalters	Schaustellung frequenz	Ankopplung des Meßsenders	Anschluß des Anzeigeinstruments	Abgleich	Anmerkung
Suc	⓱	98.1 MHz [unmoduliert]	FM (UKW)	98.1 MHz	Über Ersatzantenne (Abb. 2) an die Antennensteckdose	Ausgansleistungsmesser an Lautsprecheranschlüsse	IFT801	Auf Maximum stellen

ABGLEICH VON SUCHEREMPFINDLICHKEIT MIT MESSENDER

- Lautstärke-, Klang- und Balanceregler auf belieger Stelle stehen lassen.
- Meßsender über Ersatzantenne (Abb. 1 oder 2) an Antennenstockdose koppeln.

	Stufe	Meßsenderfrequenz	Stellung des Wellenbereich-umschalters	Ankopplung des Meßsenders	Ableich	Anmerkung
Suc AM	⑱	999 kHz [400 Hz Mod.] 30 dB/µV Eingabe in DX	MW	Über Ersatzantenne (Abb. 1) an die Antennensteckdose	VR153	VR153 einstellen, um das Eingabesignal zu suchen
Suc FM	⑲	98.1 MHz [400 Hz Mod.] 18 dB/µV Eingabe in DX	FM (UKW)	Über Ersatzantenne (Abb. 2) an die Antennensteckdose .	VR150	VR150 einstellen, um das Eingabesignal zu suchen

- Die angegebenen Stufen zwei-bis dreimal wiederholen.

ABGLEICH VON E. I. A. -SCHALTUNG MIT MESSENDER UND IMPULSGEBER

- Wellenbereichumschalter auf FM (UKW) stellen.
- Meßsender und Impulsgeber über Zweisignal-Ersatzantenne an Antennensteckdose ankoppeln.

Meßsender	Frequenz	98 MHz (400 Hz Mod.)
	19 kHz Pilotsignal	7.5 kHz
	Hauptsignal	22.25 kHz
	Ausgangspegel	30 ~ 40 dB/µV
Impulsgeber	Anstiegszeit	5 ~ 10 nsec
	Breite	40 µsec
	Abstand	1 kHz
	Pagel	+5 Vp-p

- Zuerst Abstimmskala auf Testsignal einstellen und Ausgangspegel des Meßsenders auf 30 dB/µV steuern.
- Dann Modulationspegel und Lautstärke auf Maximum stellen.

	Stufe	Modulationsfrequenz	Anzeigeinstruments	Abgleich	Anmerkung
EIA	⑳	98 MHz [unmoduliert]	Lautsprecher.	L500 IFT500	Auf minimalen Geräuschpegel einstellen.

ABGLEICH VON FM-MULTIPLEX MIT MESSENDER & STEREOSIGNAL-MESSENDE

- Lautstärkeregler auf Maximum und Klangregler auf Hochton stellen.
- Balanceregler auf Mitte stellen.
- DX/LOCAL Wahlschalter auf DX stellen.
- Meßsender über Ersatzantenne (Abb. 2) an Antennenstockdose koppeln.
- Ausgangsleistung des Meßsenders klein genung einstellen, um Uberbelastung der Schaltkreise zu vermeiden.

	Stufe	Meßsenderfrequenz	Stellung des Wellenbereich-umschalters	Anschluß des Anzeigeninstruments	Abgleich	Anmerkung
FM MPX	㉑	Kein Signal	FM (UKW)	Frequenzzähler zwischen Testpunkt ④ und Erdung	VR552	Auf 19 kHz ± 30 Hz einstellen
	㉒	89.9 MHz [400 Hz Mod. Lichten Kanal] 60 dB/µV Eingabe	"	Röhrenvoltmeter an rechten Lautsprecher	VR551	Auf Minimum einstellen
		89.9 MHz [400 Hz Mod. Richter Kanal] 60 dB/µV Eingabe		Röhrenvoltmeter an linke Lautsprecher		Auf Minimum einstellen

- Die angegebenen Stufen zwei-bis dreimal wiederholen.

ABGLEICH VON SK/DK (Verkehrsfunk) MIT FREQUENZZAHLER

- Lautstärke-, Klang- und Balanceregler auf belieger Stelle stehen lassen.
- Für einen einfachen Abgleich den TP1 erden.

	Stufe	Meßsenderfrequenz	Stellung des Wellenbereich-umschalters	Anschluß des Anzeigeninstruments	Abgleich	Anmerkung
SK	㉓	Kein Signal	VF	Frequenzzähler zwischen Testpunkt③und Erdung	VR152	Auf 57 kHz ± 100 Hz einstellen
DK	㉔	"	"	Frequenzzähler zwischen TP125 und Erdung	VR601	Auf 125 Hz ±0.5 Hz einstellen

ALIGNMENT INSTRUCTIONS/ABCLEICH-ANLEITUNG (TAPE BLOCK)

DOLBY NOISE REDUCTION ALIGNMENT USING TEST TAPE AND VTVM

- Set the dolby switch in the "in" position.

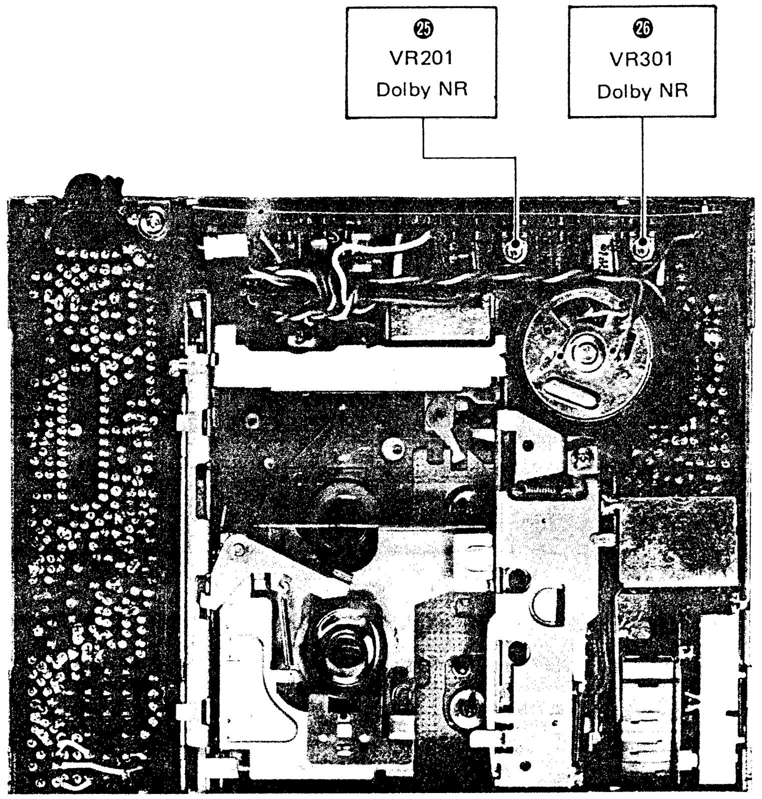
	STEP	SIGNAL FEED-POINT	INDICATOR	ADJUST	REMARKS
Dol-by NR	㉕	Insert the test tape, MTT-150 (TMT-6130), and playback.	VTVM to TP ② and ground, through the dolby filter	VR201	Adjust to 580 mV reading on VTVM.
	㉖		VTVM to TP ① and ground, through the dolby filter	VR301	

DOLBY RAUSCHUNTERDRUCKUNGS-ABGLEICH MIT TESTBAND UND VTVM

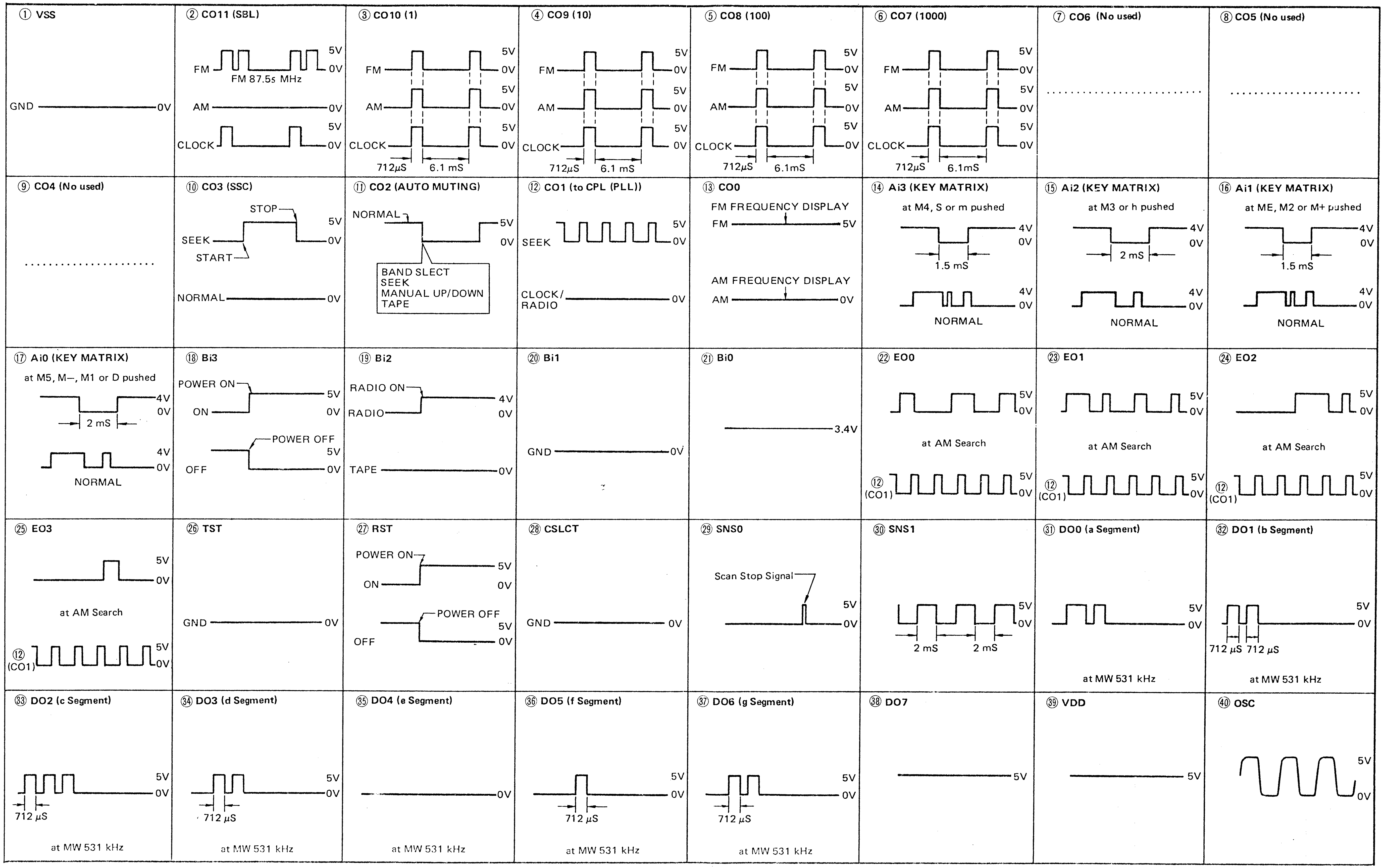
- Den Dolby-Schalter in die Position "IN" bringen.

	Stufe	Ankopplung des Meßsenders	Anschluß des Anzeigeninstruments	Abgleich	Anmerkung
Dol-by NR	㉕	Des Testband einlegen, MTT-150 (TMT-6130) and abspielen.	VTVM zu TP② und durch das Dolby-Filter erden.	VR201	Auf 580 mV Ablesung auf VTVM einstellen.
	㉖		VTVM zu TP① und durch das Dolby-Filter erden.	VR301	

ALIGNMENT POINTS /ABGLEICHSTELLEN (TAPE BLOCK)



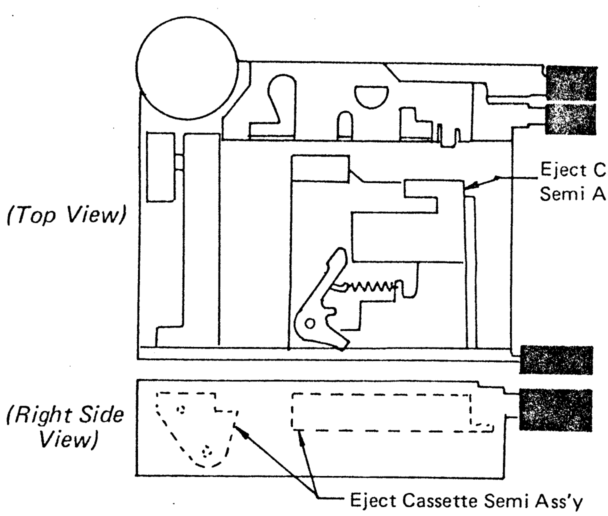
WAVEFORM OF MICROCOMPUTER/WELLENFORN DES MIKROCOMPUTERS (IC801,MN1455CV)


① VSS
GND
0V
② CO11 (SBL)
FM
FM 87.5s MHz
AM
CLOCK
5V
0V
③ CO10 (1)
④ CO9 (10)
⑤ CO8 (100)
⑥ CO7 (1000)
712μS
6.1 mS
⑦ CO6 (No used)
⑧ CO5 (No used)
⑨ CO4 (No used)
⑩ CO3 (SSC)
STOP
SEEK
START
NORMAL
⑪ CO2 (AUTO MUTING)
NORMAL
BAND SLECT
SEEK
MANUAL UP/DOWN
TAPE
⑫ CO1 (to CPL (PLL))
SEEK
CLOCK/
RADIO
⑬ CO0
FM FREQUENCY DISPLAY
FM
AM FREQUENCY DISPLAY
AM
⑭ Ai3 (KEY MATRIX)
at M4, S or m pushed
4V
1.5 mS
NORMAL
⑮ Ai2 (KEY MATRIX)
at M3 or h pushed
2 mS
⑯ Ai1 (KEY MATRIX)
at ME, M2 or M+ pushed
⑰ Ai0 (KEY MATRIX)
at M5, M–, M1 or D pushed
⑱ Bi3
POWER ON
ON
POWER OFF
OFF
⑲ Bi2
RADIO ON
RADIO
TAPE
⑳ Bi1
㉑ BiO
3.4V
㉒ EO0
at AM Search
⑫ (CO1)
㉓ EO1
㉔ EO2
㉕ EO3
㉖ TST
㉗ RST
㉘ CSLCT
㉙ SNSO
Scan Stop Signal
㉚ SNS1
2 mS
㉛ DO0 (a Segment)
at MW 531 kHz
㉜ DO1 (b Segment)
712 μS
㉝ DO2 (c Segment)
㉞ DO3 (d Segment)
㉟ DO4 (e Segment)
㊱ DO5 (f Segment)
㊲ DO6 (g Segment)
㊳ DO7
㊴ VDD
㊵ OSC

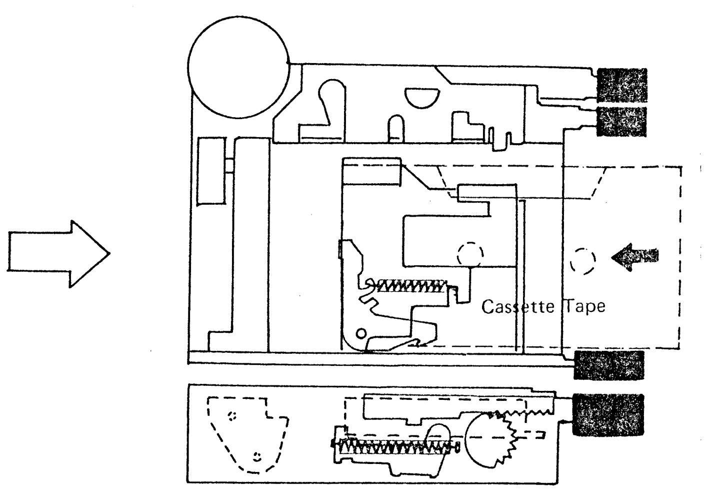
AUTOMATIC REVERSING CASSETTE DECK/AUTOMATISCHER CASSETTENAUSWURF

PLAY OPERATION

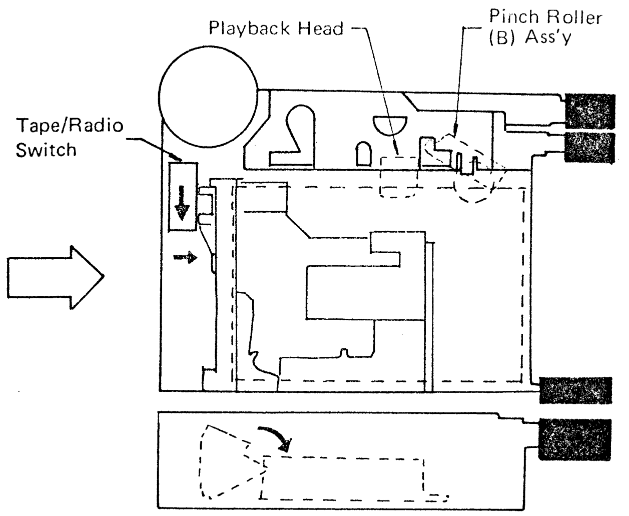
No Loaded


(Top View)
Eject Chassis Semi Ass'y
(Right Side View)
Eject Cassette Semi Ass'y

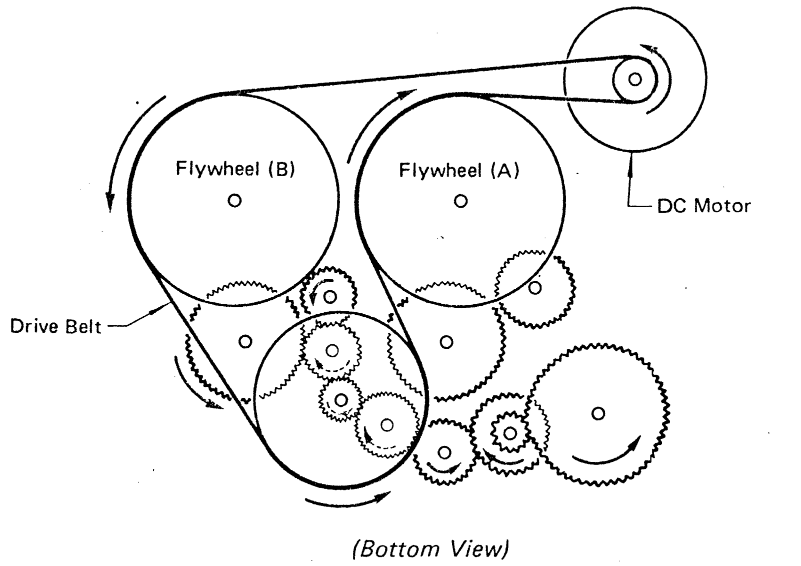
Inserting Cassette Tape


Cassette Tape

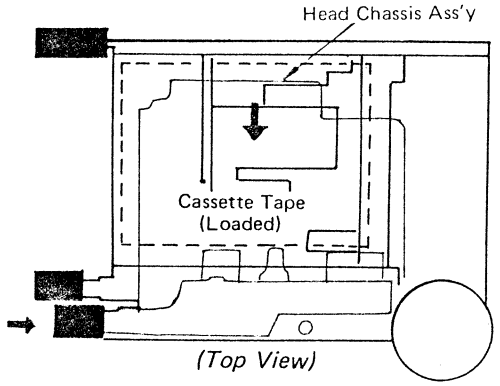
Cassette Tape Loaded


Playback Head
Pinch Roller (B) Ass'y
Tape/Radio Switch

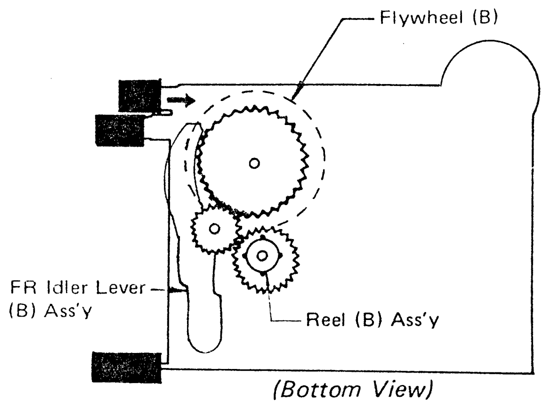
PLAY OPERATION DRIVING SYSTEM


Flywheel (B)
Flywheel (A)
DC Motor
Drive Belt
(Bottom View)

FF OPERATION (▶▶ RUNNING)

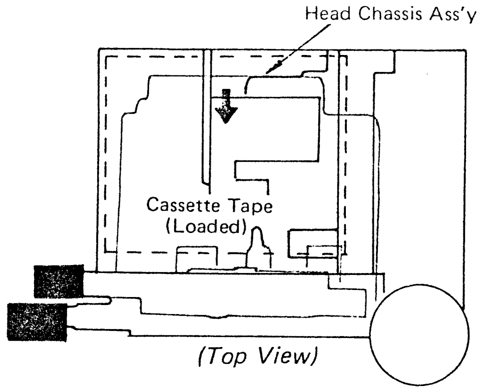

Head Chassis Ass'y
Cassette Tape (Loaded)
(Top View)

Depressing the FF (▶ ▶) button, the head chassis ass'y slides and the head & pinch roller ass'y move to back.

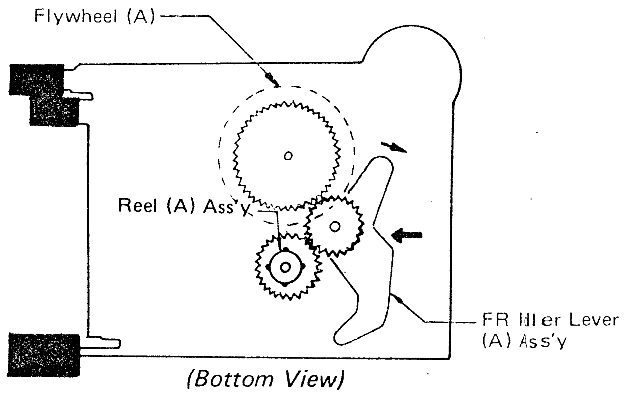

Flywheel (B)
FR Idler Lever (B) Ass'y
Reel (B) Ass'y
(Bottom View)

Depressing the FF (▶ ▶) button, the FR idler lever (B) ass'y moves to rotate directly the gear of reel (B) ass'y from the flywheel.

(◀◀ RUNNING)


Head Chassis Ass'y
Cassette Tape (Loaded)
(Top View)

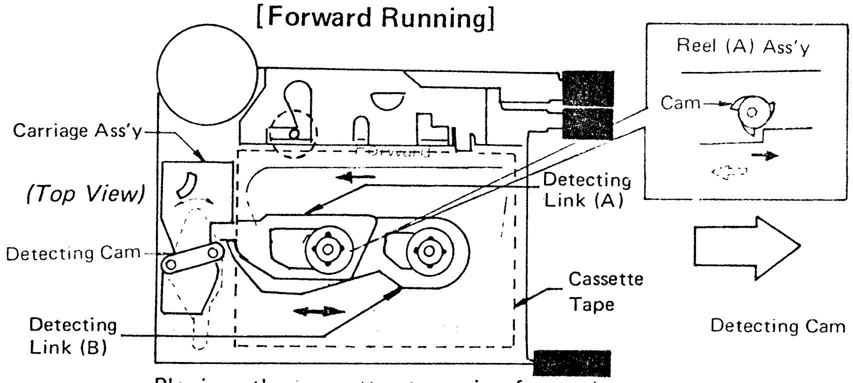
Depressing the FF (◀ ◀) button, the head chassis ass'y slides and the head & pinch roller ass'y move to back.


Flywheel (A)
Reel (A) Ass'y
FR Idler Lever (A) Ass'y
(Bottom View)

Depressing the FF (◀ ◀) button, the FR idler lever (A) ass'y moves to rotate directly the gear of reel (A) ass'y from the flywheel.

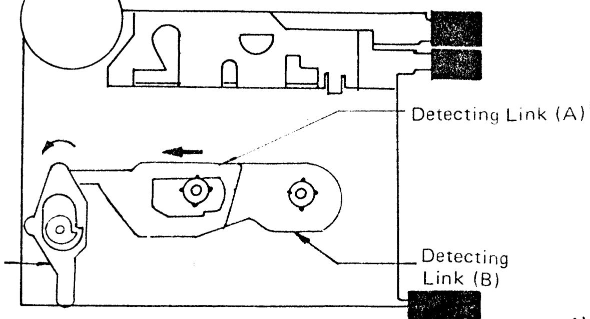
AUTOMATIC REVERSING OPERATION

Playing Cassette Tape [Forward Running]

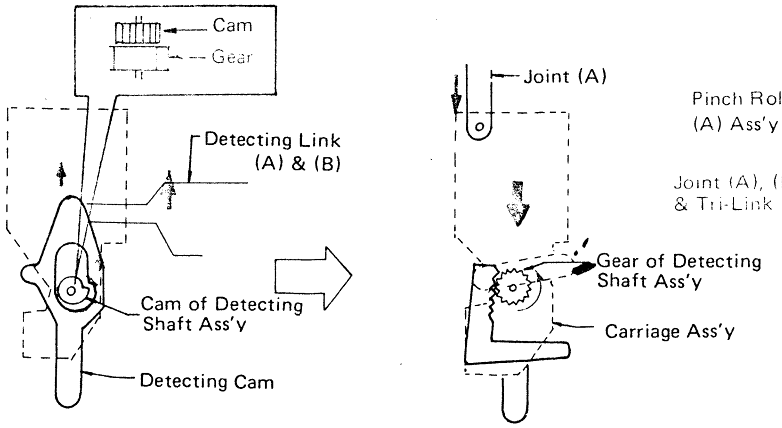

Carriage Ass'y
(Top View)
Detecting Cam
Detecting Link (B)
Detecting Link (A)
Cassette Tape
Reel (A) Ass'y
Cam

Playing the cassette tape in forward running, the detecting links (A) & (B), and detecting cam move repeatedly by the cam of reel (A) ass'y.

At Tape End [Reel (A) Ass'y stops to rotate]

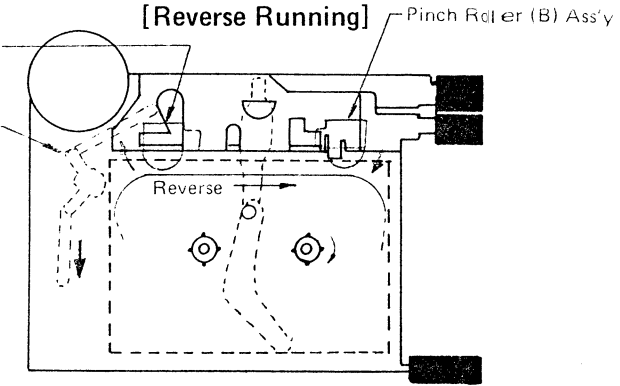

Detecting Cam
Detecting Link (A)
Detecting Link (B)

Depressing the detecting cam by the detecting link (A) at tape end.


Cam
Gear
Detecting Link (A) & (B)
Cam of Detecting Shaft Ass'y
Detecting Cam
Joint (A)
Gear of Detecting Shaft Ass'y
Carriage Ass'y

1) Rotating the cam of detecting shaft ass'y, the detecting cam moves together with the detecting link (A) & (B).
2) Rotating the gear of detecting shaft ass'y, the carriage ass'y moves together with the joint (A) & (B).

Cassette Tape, Reversed [Reverse Running]


Pinch Roller (A) Ass'y
Joint (A), (B) & Tri-Link
Pinch Roller (B) Ass'y
Reverse

Moving the joint (A), the tape running is reversed by transmitting through the joint (B) and tri-link.

SERVICING HINT FOR CASSETTE DECK/WARTUNGSHINWEISE FÜR DAS CASSETTEN DECK

SERVICING HINT FOR CASSETTE DECK

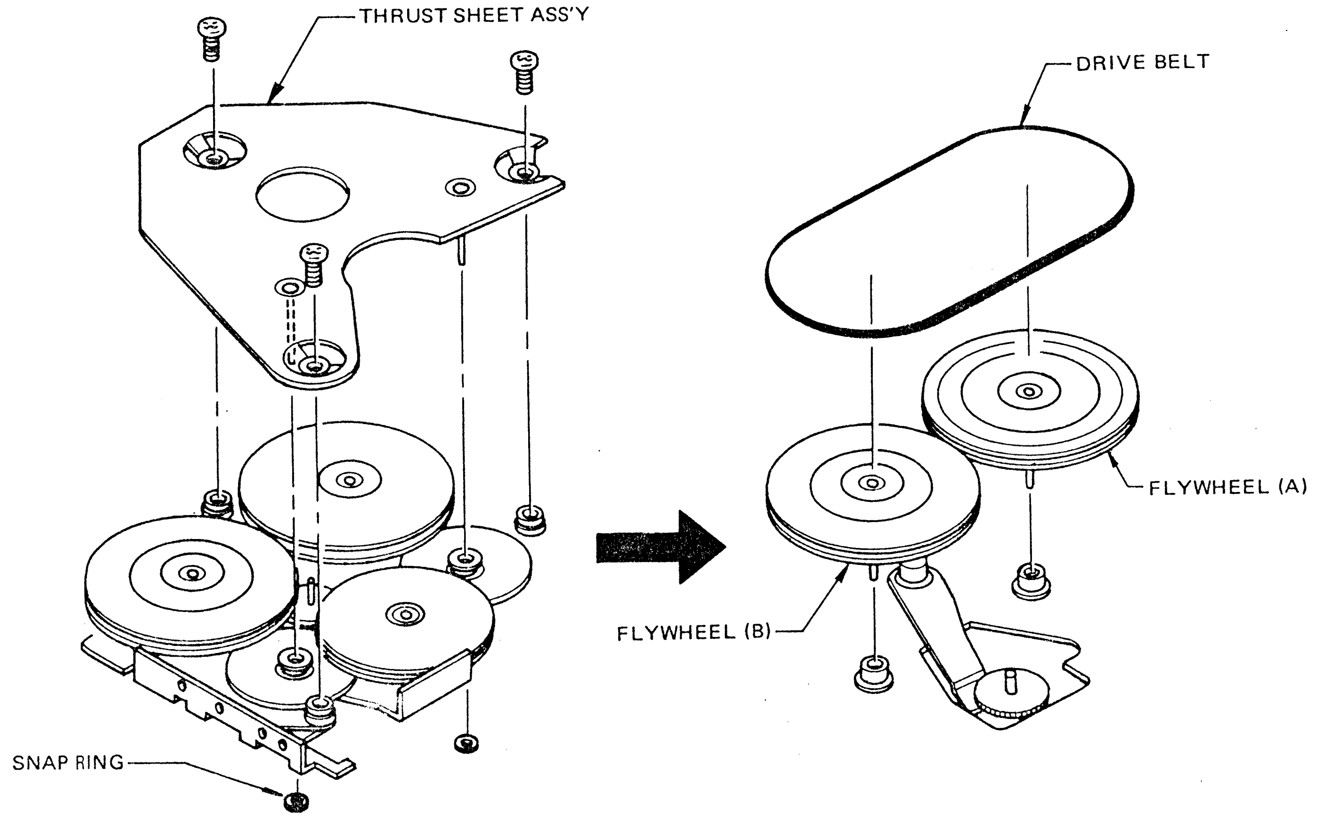
REPLACEMENT OF FLYWHEEL (A) & (B)

1) Remove 2 snap rings.
2) Remove the thrust sheet ass'y by 2 screws.
3) Remove the drive belt.
4) Pull out the flywheel (A) or (B).

WARTUNGSHINWEISE FUR DAS CASSETTENDECK

AUSWECHSELN DES SCHWUNGRADES (A) UND (B)

1) 2 Schnappring entfernen.
2) Die Druckplatte durch Lösen von 2 Schrauben entfernen.
3) Den Antriebsriemen abnehmen.
4) Das Schwungrad (A) oder (B) herausziehen.

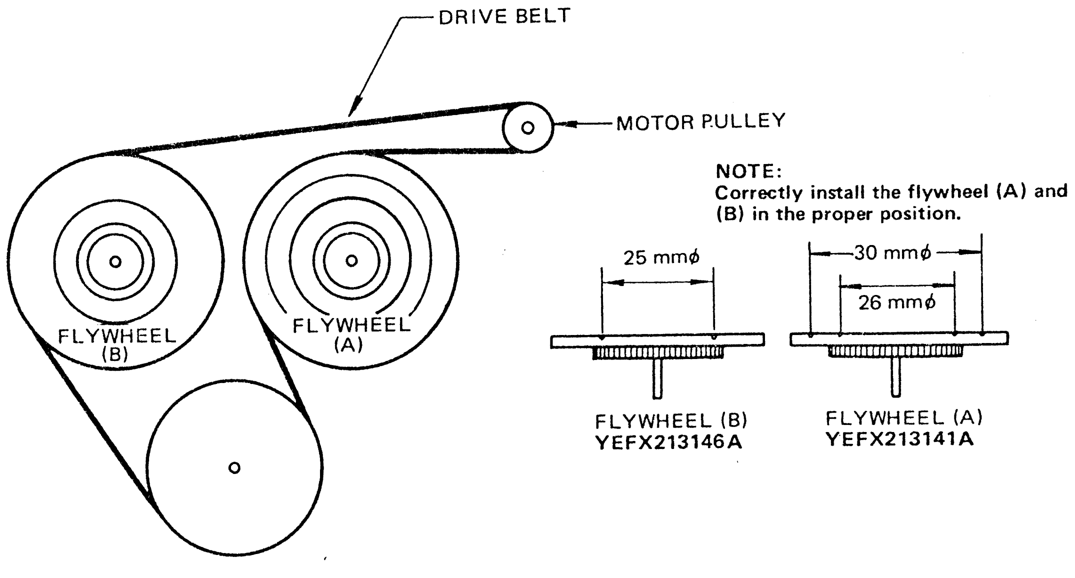

THRUST SHEET ASS'Y
SNAP RING
DRIVE BELT
FLYWHEEL (A)
FLYWHEEL (B)

RE-INSTALLATION OF DRIVE BELT

1) Re-install the drive belt as follows.

WIEDERANBRINGUNG DES ANTRIEBSRIEMENS

1) Den Antriebsriemen wie folgt wieder anbringen.


DRIVE BELT
MOTOR PULLEY
FLYWHEEL (B)
FLYWHEEL (A)
25 mmϕ
30 mmϕ
26 mmϕ

NOTE:
Correctly install the flywheel (A) and (B) in the proper position.

FLYWHEEL (B)
YEFX213146A

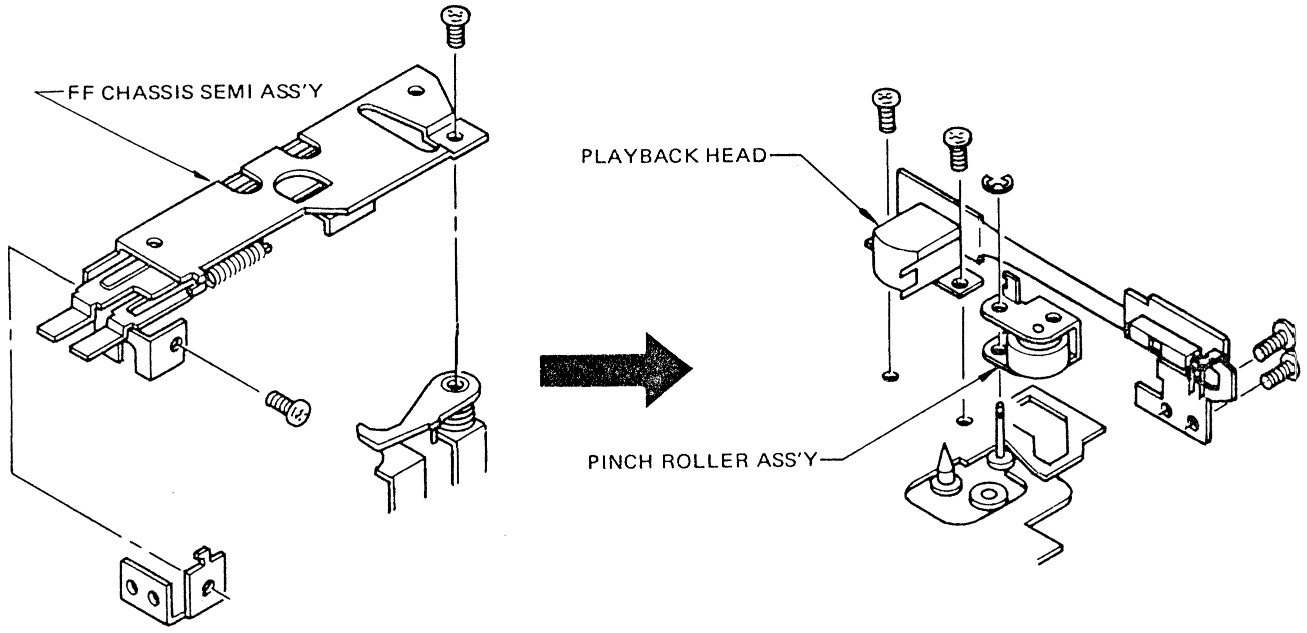
FLYWHEEL (A)
YEFX213141A

REPLACEMENT OF PLAYBACK HEAD AND PINCH ROLLER ASS'Y

1) Remove the FR chassis semi ass'y by 2 screws.
2) To remove the playback head w/flexible PCB, remove 2 screws on the head and 2 screws on the switch mounting bracket.
3) To remove the pinch roller ass'y, unhook the spring and remove the snap ring.

AUSWECHSELN VON WIEDERGABEKOPF UND ANDRUCKSROLLE

1) Die FR-Baugruppe durch Lösen von 2 Schrauben entfernen.
2) Um den Wiedergabekopf mit flexiblem PCB herauszunehmen, sind 2 Schrauben auf dem Kopf und 2 Schrauber an der Schalter-Halterung zu entfernen.
3) Um die Andrucksrolle herauszunehmen, die Feder aushaken und den Schnappring entfernen.

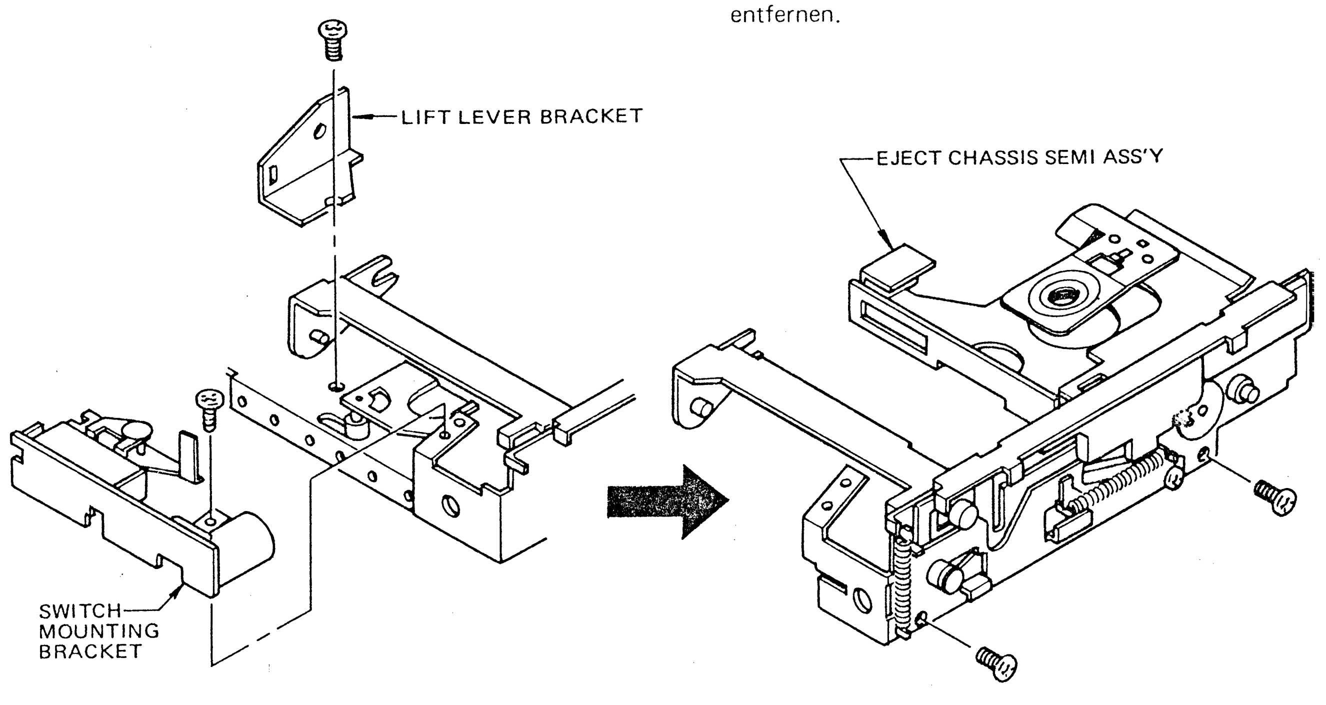

FF CHASSIS SEMI ASS'Y
PLAYBACK HEAD
PINCH ROLLER ASS'Y

REPLACEMENT OF EJECT CHASSIS SEMI ASS'Y

1) Remove the switch and switch mounting bracket by 1 screw.
2) Remove the lift lever bracket by 1 screw.
3) Remove the eject chassis semi ass'y by 2 screws.

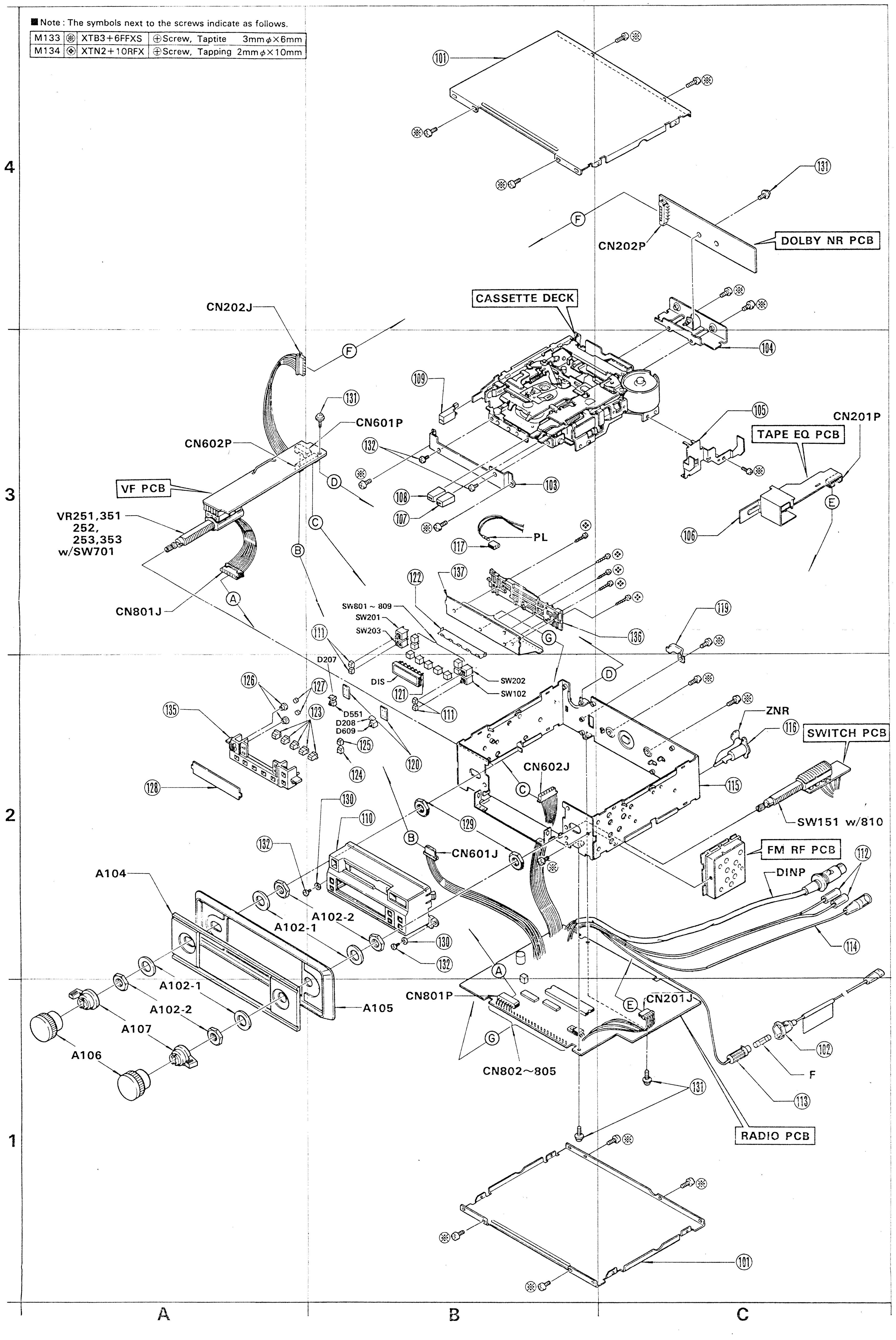
AUSWECHSELN DER AUSWURF-TEILBAUGRUPPE

1) Den Schalter und dessen Halterung durch Lösen einer Schraube entfernen.
2) Die Halterung für den Anhebhebel durch Lösen einer Schraube entfernen.
3) Die Auswurf-Teilbaugruppe durch Lösen von 2 Schrauben entfernen.


LIFT LEVER BRACKET
EJECT CHASSIS SEMI ASS'Y
SWITCH MOUNTING BRACKET

EXPLODED VIEW(UNIT)/AUFGELÖSTE DARSTELLUNG(GANZES GERÄT)

- Numbers in ○ are indicated REF. NO. in the REPLACEMENT PARTS LIST.



■ Note : The symbols next to the screws indicate as follows.

M133	⊗	XTB3+6FFXS	⊕Screw, Taptite 3mmφ×6mm
M134	⊛	XTN2+10RFX	⊕Screw, Tapping 2mmφ×10mm

4
3
2
1
A
B
C
101
131
F
CN202P
DOLBY NR PCB
CASSETTE DECK
CN202J
104
109
105
CN201P
TAPE EQ PCB
131
CN601P
CN602P
132
D
103
VF PCB
108
107
106
E
VR251,351
252,
253,353
w/SW701
C
PL
117
B
122
137
CN801J
A
SW801 ~ 809
SW201
SW203
119
136
G
111
D207
DIS
SW202
SW102
121
111
D
126
127
123
D551
D208
D609
135
125
ZNR
116
SWITCH PCB
124
120
CN602J
115
128
130
C
110
129
SW151 w/810
B
CN601J
132
FM RF PCB
112
A104
DINP
A102-2
A102-1
130
132
114
A102-1
A
A105
CN801P
E
CN201J
A102-2
A107
G
102
A106
F
CN802~805
131
113
RADIO PCB
101

Replacement Parts List
Model NO. CQ-954EG

NOTES:

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Next to the Ref. No. in the parts list is a location key, to show the general location of the parts shown in the exploded drawing, as in a road map.

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
ZNR (2-C)	ERZD03DS331	Varister	1	
⚠F (1-C)	XBB1C10NR1	Fuse 1A	1	
PL (3-B)	YEAL22007L	Pilot Lamp	1	
CN802 ~ 805	YEAE01341	10P Connector	4	
DINP (2-C)	YEAE01198B	8P DIN Connector (Plug)	1	
CN201J (1-C)	EMCM0416D61	4P Jack	1	
CN201P (3-C)	EMCS0450ML	4P Plug	1	
CN202J (4-A)	EMCM0812D61	8P Jack	1	
CN202P (4-C)	EMCS0850ML	8P Plug	1	
CN601J (2-B)	EMCM0510D61	5P Jack	1	
CN601P (3-B)	EMCS0552M	5P Plug	1	
CN602J (2-B)	EMCM0910D61	9P Plug	1	
CN602P (3-A)	EMCS0952M	9P Plug	1	
CN801J (3-A)	YEAE01340	8P Jack	1	
CN801P (1-B)	YEAE01342	8P Plug	1	
M101 (4-B) (1-C)	YEFA03464	Cover, Upper and Bottom	2	
M102 (1-C)	YEAJ01451	Power Supply Cord , Main	1	
M103 (3-B)	YEFX0211180	Mounting Bracket , Deck (Front)	1	
M104 (3-C)	YEFX0211070	Mounting Bracket , Deck (Rear)	1	
M105 (3-C)	YEFX0211071A	Mounting Bracket , PCB	1	
M106 (3-C)	YEFA13329	Case, PCB	1	
M107 (3-B)	YEFE13148 A	Button , FF, Rew (▶▶)	1	
M108 (3-B)	YEFE13149 A	Button , FF, Rew (◀◀)	1	
M109 (3-B)	YEFE13150A	Button , Eject	1	
M110 (2-B)	YEFC021024	Escutcheon Ass'y	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
M111 (3-B) (2-B)	YEFE13271	Button , Metal CrO2 , Loudness, Dolby NR,	4	
M112 (2-C)	YEAJ01438	Cord , Foot Switch	1	
M113 (1-C)	YEAJ01450	Power Supply Cord , Main	1	
M114 (2-C)	YEAJ01168	Power Supply Cord , Motor Antenna	1	
M115 (2-C)	YEFA01514	Chassis	1	
M116 (2-C)	YEAA10023	Antenna Receptacle	1	
M117 (3-B)	YEFK04315	Pilot Lamp Holder	1	
M119 (3-C)	YEFX007195	Cord Clamp	1	
M120 (2-B)	YEFS01220	Pad	2	
M121 (2-B)	YEFS01221	Pad	1	
M122 (3-C)	YEFX0211189	Plate, Ground	1	
M123 (2-B)	YEFE13272	Button , Preset	5	
M124 (2-B)	YEFE13273	Button , M (Orange)	1	
M125 (2-B)	YEFE13274	Button , D (Brown)	1	
M126 (2-A)	YEFE13275	Button , h, m	2	
M127 (2-B)	YEFS01222	Pad	2	
M128 (2-A)	YEFJ08624	Display Plate	1	
M129 (2-B)	YEJN01042	Nut Hexagon	2	
M130 (2-B)	XWE3FX	Washer , Flat 3mmø	2	
M131	YEJT03007	⊕ Screw	4	
M132	YEJS06027	⊕ Screw	4	
M133	XTB3 + 6FFXS	⊕ Screw, Taptite 3mmø x 6mm	23	
M134	XTN2 + 10RFX	⊕ Screw, Taptite 2mmø x 10mm	5	
M135 (2-A)	YEFA13372	Case, Key	1	
M136 (3-C)	YEFA13373	Case, Key	1	
M137 (3-B)	YEAP1142	Flexible PCB (PCB only)	1	

TAPE PLAYER PARTS

HEAD

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
H (3-A)	YEAHHG442839	Playback Head	1	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
M201 (2-C)	YEAS07100	Reverse Switch	1	
M202 (4-C)	YEAS07041	Tape/Radio Selector Switch	1	
M280 (3-C)	YEAS23125	Muting Switch	1	

MECHANICAL PARTS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
M203 (2-C)	YEFX005510	Spring	1	
M204 (1-C)	YEFX021933	Mounting Bracket, Switch	1	
⚠ M205 (3-B)	YASAK01040	DC Motor Ass'y	1	
M206 (4-C)	YEFX021997	Mounting Bracket, Switch	1	
M207 (4-C)	YEFX013010A	Actuator	1	
M208 (3-A)	YEAP906A	Flexible PCB (No Resistor/Capacitor)	1	
M209 (2-A)	YEFA01420D	Main Chassis Ass'y	1	
M210	YEFW07071	Stud	1	
M211 (1-A)	YEFX219112	Thrust Sheet Ass'y	1	
M213 (3-A)	YEFA01417A	Head Chassis Ass'y	1	
M214 (2-A) (2-B)	YEFX218168A	Head Chassis Guide Roller	2	
M215 (2-A)	YEFX005522	Head Chassis Spring	1	
M216 (2-B)	YEFW06576	Play Reverse Lever Ass'y	1	
M217 (2-A)	YEFX003111A	Play Idler Gear	1	
M218 (2-A)	YEFX003116A	Play Idler Gear (B) Ass'y	1	
M219 (2-A)	YEFX005519	Idler Lever Pressure Spring	1	
M220 (1-C)	YEFW06578	FR Idler Lever (A) Ass'y	1	
M221 (1-C)	YEFW06579	FR Reverse Lever (A) Ass'y	1	
M222 (2-A)	YEFW06580A	FR Idler Lever (B) Ass'y	1	

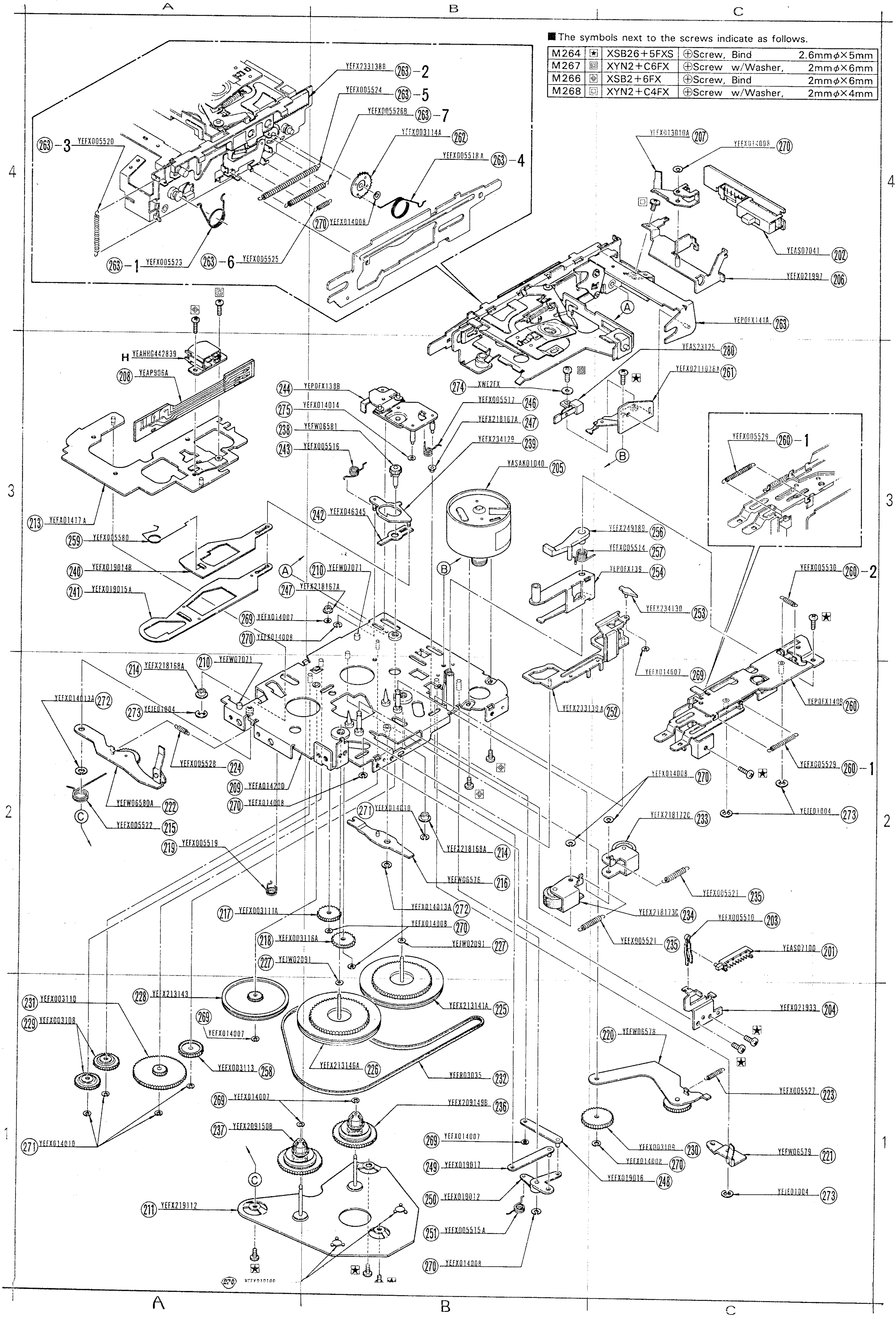
Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
M223 (1-C)	YEFX005527	FR Idler Lever (A) Spring	1	
M224 (2-A)	YEFX005528A	FR Idler Lever (B) Spring	1	
M225 (1-B)	YEFX213141A	Flywheel (A)	1	
M226 (1-B)	YEFX213146A	Flywheel (B)	1	
M227 (1-B) (2-B)	YEJW02091A	Washer, Flat	2	
M228 (1-A)	YEFX213143	Middle Wheel	1	
M229 (1-A)	YEFX003108	Detecting Idler Gear (A)	2	
M230 (1-C)	YEFX003109	Detecting Idler Gear (B)	1	
M231 (1-A)	YEFX003110	Detecting Idler Gear (C)	1	
M232 (1-B)	YEFR03035	Rubber Belt	1	
M233 (2-C)	YEFX218172C	Pinch Roller (A) Ass'y	1	
M234 (2-C)	YEFX218173C	Pinch Roller (B) Ass'y	1	
M235 (2-C)	YEFX005521	Pinch Roller Pressure Spring	2	
M236 (1-B)	YEFX209149C	Reel (A) Ass'y	1	
M237 (1-A)	YEFX209150C	Reel (B) Ass'y	1	
M238 (3-A)	YEFW06581	Detecting Shaft Ass'y	1	
M239 (3-B)	YEFX234129	Detecting Cam	1	
M240 (3-A)	YEFX019014B	Detecting Link (A)	1	
M241 (3-A)	YEFX019015A	Detecting Link (B)	1	
M242 (3-B)	YEFX046345	Trigger Lever	1	
M243 (3-A)	YEFX005516	Detecting Cam Return Spring	1	
M244 (3-A)	YEP0FX138B	Carriage Ass'y	1	
M246 (3-B)	YEFX005517	Rack Lever Spring	1	
M247 (3-B)	YEFX218167A	Carriage Roller	2	
M248 (1-C)	YEFX019016	Joint Plate (A)	1	
M249 (1-B)	YEFX019017	Joint Plate (B)	1	
M250 (1-B)	YEFX019012	Tri-Link	1	
M251 (1-B)	YEFX005515A	Tri-Link Spring	1	
M252 (2-C)	YEFX233139A	Pinch Roller Selector Plate Ass'y	1	
M253 (3-C)	YEFX234130	Program Selector Release Cam	1	
M254 (3-C)	YEP0FX139	FR Head Escape Arm Ass'y	1	
M256 (3-C)	YEFX249189	Program Selector Lock Arm	1	
M257 (3-C)	YEFX005514	Program Lock Spring	1	
M258 (1-A)	YEFX003113	Drive Shaft Gear	1	

EXPLODED VIEW(TAPE DECK) /AUFGELÖSTE DARSTELLUNG(TONBANDGERÄT)

- Numbers in ○ are indicated REF. NO. in the REPLACEMENT PARTS LIST.

■ The symbols next to the screws indicate as follows.

M264	★	XSB26+5FXS	⊕Screw, Bind	2.6mmφ×5mm
M267	◙	XYN2+C6FX	⊕Screw w/Washer,	2mmφ×6mm
M266	❖	XSB2+6FX	⊕Screw, Bind	2mmφ×6mm
M268	☐	XYN2+C4FX	⊕Screw w/Washer,	2mmφ×4mm


A
B
C
4
3
2
1
YEFX233138B (263)-2
YEFX005524 (263)-5
YEFX005526B (263)-7
YEFX003114A (262)
YEFX005518A (263)-4
(263)-3 YEFX005520
(270) YEFX014008
(263)-1 YEFX005523
(263)-6 YEFX005525
YEFX013010A (207)
YEFX014008 (270)
YEAS07041 (202)
YEFX021997 (206)
YEP0FX141A (263)
YEAS23125 (280)
YEFX0211078A (261)
(274) XWE2FX
YEFX005517 (246)
YEFX218167A (247)
YEFX234129 (239)
YASAK01040 (205)
H YEAHHG442839
(208) YEAP906A
(213) YEFA01417A
(244) YEP0FX138B
(275) YEFX014014
(238) YEFW06581
(243) YEFX005516
(242) YEFX046345
(259) YEFX005580
(240) YEFX019014B
(241) YEFX019015A
(210) YEFW07071
(247) YEFX218167A
(269) YEFX014007
(270) YEFX014008
YEFX005529 (260)-1
YEFX249189 (256)
YEFX005514 (257)
YEP0FX139 (254)
YEFX234130 (253)
YEFX014007 (269)
YEFX233139A (252)
YEFX005530 (260)-2
YEP0FX140B (260)
YEFX005529 (260)-1
YEJE01004 (273)
(214) YEFX218168A
(210) YEFW07071
YEFX014013A (272)
(273) YEJE01004
YEFX005528 (224)
(209) YEFA01420D
(270) YEFX014008
YEFW06580A (222)
YEFX005522 (215)
(219) YEFX005519
(271) YEFX014010
YEFX218168A (214)
YEFW06576 (216)
YEFX014013A (272)
YEFX014008 (270)
YEFX218172C (233)
YEFX005521 (235)
YEFX218173C (234)
YEFX005510 (203)
YEFX005521 (235)
YEAS07100 (201)
(217) YEFX003111A
YEFX014008 (270)
(218) YEFX003116A
YEJW02091 (227)
(227) YEJW02091
YEFX021933 (204)
(228) YEFX213143
(231) YEFX003110
(229) YEFX003108
(269) YEFX014007
YEFX003113 (258)
YEFX213141A (225)
YEFX213146A (226)
YEFR03035 (232)
(220) YEFW06578
YEFX005527 (223)
(269) YEFX014007
YEFX209149B (236)
(237) YEFX209150B
(271) YEFX014010
(269) YEFX014007
(249) YEFX019017
YEFX019016 (248)
YEFX003109 (230)
YEFX014008 (270)
YEFW06579 (221)
(211) YEFX219112
(250) YEFX019012
(251) YEFX005515A
(270) YEFX014008
YEJE01004 (273)
(279) YEFX010100

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
M259 (3-A)	YEFX005580	Spring	1	
M260 (2-C)	YEP0FX140B	FR Chassis Semi Ass'y	1	
M260-1 (2-C)	YEFX005529	FR Lever Spring	2	
M260-2 (2-C)	YEFX005530	FR Lock Spring	1	
M261 (3-C)	YEFX0211078A	Reverse Gear	1	
M262 (4-B)	YEFX003114A	Reverse Gear	1	
M263 (4-C)	YEP0FX141A	Eject Chassis Semi Ass'y	1	
M263-1 (4-A)	YEFX005523	Cassette Lift Spring	1	
M263-2 (4-B)	YEFX233138B	Rack Ass'y	1	
M263-3 (4-A)	YEFX005520	Lift Lock Lever Spring	1	
M263-4 (4-B)	YEFX005518A	Reverse Gear Spring	1	
M263-5 (4-B)	YEFX005524	Eject Spring	1	
M263-6 (4-A)	YEFX005525	Traction Spring	1	
M263-7 (4-B)	YEFX005526B	Return Spring	1	
M264	XSB26 + 5FXS	⊕ Screw, Bind 2.6mmø x 5mm	10	
M266	XYN2 + C6FX	⊕ Screw w/Washer, 2mmø x 6mm	1	
M267	XSB2 + 6FX	⊕Screw, Bind 2mmø x 6mm	1	
M268	XYN2 + C4FX	⊕ Screw w/Washer, 2mmø x 4mm	2	
M269	YEFX014007	Snap Ring	10	
M270	YEFX014008	Snap Ring	12	
M271	YEFX014010	Snap Ring	7	
M272	YEFX014013A	Snap Ring	2	
M273	YEJE01004	E-Ring	5	
M274	XWE2FX	Washer, Flat 2mmø	1	
M275	YEFX014014	Snap Ring	1	
M276	YEFX219108	Thrust Sheet	2	
M277	XSB26 + 4FXR	⊕ Screw, Bind 2.6mmø x 4mm	2	

ICs AND TRANSISTORS

RADIO BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
IC51	AN7254	FM RF Amp, Conv. & IF Amp	1	
IC52, 53, 303	YEAMNJM78L08	Voltage Stabilizer	3	
IC101	YEAMLA1130	AM RF Amp, Conv., IF Amp & Det	1	
IC150	AN7256	FM IF Amp w/Detector	1	
IC151	YEAMLA2200	VF Decoder (SK)	1	
IC500	AN6130N	FM EIA	1	
IC551	YEAMBA1350	FM MPX	1	
IC651	YEAMNJM4558A	AF Amp	1	
IC801	MN1455CV	Microcomputer	1	
IC802	MN6147	PLL	1	
IC803	YEAMBA618	LED Drive	1	
IC804	YEAMUPA53C	LED Drive	1	
IC805	YEAMUPD4081C	AND Gate	1	
IC806	YEAMUPC78M05	Voltage Stabilizer	1	
Q51	3SK49	FM RF Amp	1	
Q52	2SC1047	FM Local OSC Buffer	1	
Q53	2SD636	Switching	1	
Q54, 101 102, 103 106, 108 152, 154 155, 156 551, 801 804, 814	2SD636	Switching	14	
Q55, 107	2SB643	Switching	2	
Q104	2SK83	AM RF Amp	1	
Q105, 811 812, 813 815	2SC2206	AM Search Amp, Search Trigger	5	
Q651, 652	YEAN2SD734	Audio Muting	2	
Q802, 809	2SB641	Switching	2	
Q803	YEAN2SK49F	Low Pass Filter	1	
Q816 ~ 824	2SD636	Search Trigger	9	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks

TAPE BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
IC202, 302	YEAMNE646B	Dolby NR	2	
IC203	AN7311	Tape EQ Amp	1	
Q201, 301	2SD636	Switching	2	

VF BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
IC601	YEAMLA2211	VF Decoder (DK)	1	
Q251, 351 601, 602 603, 604 606	2SD636	AF Amp, Switching	7	
Q605	YEAN2SD734	VF Alarm Amp	1	

DIODES

RADIO BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
D51, 52, 53	YEADBB204B	FM Varactor	3	
D101, 102 104, 105 106, 107 109, 110 112, 113 115, 116 117, 118 121, 122 123, 151 152, 153 156, 552 553, 801 802, 803 804, 805 806, 807 808, 809 810, 816 817, 818 823, 825 826, 827 828, 829 830, 831 832	MA150	AM AGC, Switching	45	
D103,108,111	YEADSVC321CD	FM Varactor	3	
D150	MA2082A	Voltage Stabilizer	1	
D812	MA26TOA	Low Pass Filter	1	
D819, 651	YEAD024	Voltage Stabilizer	2	
D820	YEADEZ057	Voltage Stabilizer	1	
D821	YEADXZ051	Voltage Stabilizer	1	
D813,814,824	YEADWZ050	Voltage Stabilizer	3	
D833	YEAD030	Reverse Voltage Prevention	1	
D551	LN229RP	Stereo Indicator	1	
D609	LN429YP	VF Indicator	1	
D207, 208	LN328GP	Tape Running Indicator	2	
DIS	LN543GKH	Display	1	

TAPE BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
D205, 206	MA150	Switching	2	

VF BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
D602, 604 605, 606 607, 608	MA150	Switching	6	
D603	YEAD024	Voltage Stabilizer	1	

CAPACITORS

RADIO BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C51	YECCD1H100FM	10 PF 50WV ±1 PF Ceramic	1	
C52	YECCD1H080DM	8 PF 50WV ±0.5 PF Ceramic	1	
C53	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C55	YECKD05471K	470 PF 50WV ±10% Ceramic	1	
C56	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C57	YECKD05471K	470 PF 50WV ±10% Ceramic	1	
C58	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C59	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C60	YECKD05471K	470 PF 50WV ±10% Ceramic	1	
C61	YECCD1H040DM	4 PF 50WV ±0.5 PF Ceramic	1	
C63	YECQX1H223M	0.022 MFD 50WV ±20% Polyester	1	
C64	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C65	YECCD1H330KM	33 PF 50WV ±10% Ceramic	1	
C66	YECCD1H020CM	2 PF 50WV ±0.25 PF Ceramic	1	
C67	YECCD1H150KM	15 PF 50WV ±10% Ceramic	1	
C68	YECCD1H080DM	8 PF 50WV ±0.5 PF Ceramic	1	
C70	YECCD1H080DM	8 PF 50WV ±0.5 PF Ceramic	1	
C71	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C72	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C73	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C75	ECEA1AK330	33 MFD 10WV Electrolytic	1	
C76	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C77	ECEA1AS330	33 MFD 10WV Electrolytic	1	
C80	YECCD1H060DM	6 PF 50WV ±0.5 PF Ceramic	1	
C81	ECEA1EK4R7	4.7 MFD 25WV Electrolytic	1	
C82	YECKD05471K	470 PF 50WV ±10% Ceramic	1	
C83	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C84	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C101	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C102	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C103	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C105	YECUV1H473KX	0.047 MFD 50WV ±10% Chip	1	
C106	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C107	YECUV1H273KX	0.027 MFD 50WV ±10% Chip	1	
C108	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C110	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C112	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C113	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C114	YECUV1E104ZF	0.1 MFD 25WV +80, −20% Chip	1	
C115	YECQX1H103M	0.01 MFD 50WV ±20% Polyester	1	
C116	YECUV1H221JM	220 PF 50WV ±5% Chip	1	
C118	YECUV1H271JM	270 PF 50WV ±5% Chip	1	
C119	YECUV1H221JM	220 PF 50WV ±5% Chip	1	
C120	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C122	YECQX1H103M	0.01 MFD 50WV ±20% Polyester	1	
C123	YECUV1H100DM	10 PF 50WV ±0.5 PF Chip	1	
C124	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C125	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C127	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C129	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C130	ECEA1AK470	47 MFD 10WV Electrolytic	1	
C131	ECEA1AS330	33 MFD 10WV Electrolytic	1	
C132	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C133	YECUV1H222KX	0.0022 MFD 50WV ±10% Chip	1	
C134	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C135	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C136	ECEA1CK330	33 MFD 16WV Electrolytic	1	
C137	ECEA50MR47	0.47 MFD 50WV Electrolytic	1	
C138	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C140	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C141	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C142	ECEA1CK100	10 MFD 16WV Electrolytic	1	
C145	ECEA1HS2R2	2.2 MFD 50WV Electrolytic	1	
C146	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C147	ECEA1CS330	33 MFD 16WV Electrolytic	1	
C149	ECEA1HS2R2	2.2 MFD 50WV Electrolytic	1	
C151	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C152	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C153	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C154	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C156	ECEA1CS221S	220 MFD 16WV Electrolytic	1	
C157	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C158	YECUV1H101JM	100 PF 50WV ±5% Chip	1	
C159	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C160	YECUV1H223KX	0.022 MFD 50WV ±10% Chip	1	
C161	ECEA1HN010S	1 MFD 50WV Electrolytic	1	
C162	YECUV1H181JM	180 PF 50WV ±5% Chip	1	
C163	YECUV1H333KX	0.033 MFD 50WV ±10% Chip	1	
C164	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C165	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C166	ECEA1ES3R3	3.3 MFD 25WV Electrolytic	1	
C167	YECQP2A391J	390 PF 100WV ±5% Polyester	1	
C168	ECEA1AS331	330 MFD 10WV Electrolytic	1	
C169	ECEA1CS101	100 MFD 16WV Electrolytic	1	
C170	ECEA1AS100	100 MFD 10WV Electrolytic	1	
C171	ECEA1CS470	47 MFD 16WV Electrolytic	1	
C172	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C173	YECUV1H220JM	22 PF 50WV ±5% Chip	1	
C174	YECUV1H473KX	0.047 MFD 50WV ±10% Chip	1	
C175	YECUV1H471KX	470 PF 50WV ±10% Chip	1	
C178	YECUV1H050CM	5 PF 50WV ±0.25 PF Chip	1	
C501	YECUV1H181JM	180 PF 50WV ±5% Chip	1	
C502	YECUV1H681KX	680 PF 50WV ±10% Chip	1	
C503	YECUV1H122KX	0.0012 MFD 50WV ±10% Chip	1	
C504	YECUV1H681KX	680 PF 50WV ±10% Chip	1	
C505	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C506	YECUV1H050CM	5 PF 50WV ±0.25 PF Chip	1	
C507	ECEA1CS100	10 MFD 16WV Electrolytic	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C508	YECUV1H680JM	68 PF 50WV ±5% Chip	1	
C509	YECUV1H682KX	0.0068 MFD 50WV ±10% Chip	1	
C510	YECUV1H153KX	0.015 MFD 50WV ±10% Chip	1	
C511	YECUV1H333KX	0.033 MFD 50WV ±10% Chip	1	
C512	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C513	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C514	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C515	ECEA1HKR47	0.47 MFD 50WV Electrolytic	1	
C516	ECEA1HKR47	0.47 MFD 50WV Electrolytic	1	
C517	YECUV1H222KX	0.0022 MFD 50WV ±10% Chip	1	
C518	ECEA1CS101	100 MFD 16WV Electrolytic	1	
C550	ECEA1CS221	220 MFD 16WV Electrolytic	1	
C551	YECUV1H221JM	220 PF 50WV ±5% Chip	1	
C552	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C553, 554	YECUV1H333KX	0.033 MFD 50WV ±10% Chip	2	
C555	ECEA1HKR22	0.22 MFD 50WV Electrolytic	1	
C556	ECEA1HKR47	0.47 MFD 50WV Electrolytic	1	
C557	ECEA1EK4R7	0.47 MFD 25WV Electrolytic	1	
C558	YECQP2A681J	680 PF 100WV ±5% Polyester	1	
C560	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C651	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C652	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C653	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C654	ECEA0JS470	47 MFD 6WV Electrolytic	1	
C655	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C656	ECEA1AS330	33 MFD 10WV Electrolytic	1	
C657	ECEA1AS330	33 MFD 10WV Electrolytic	1	
C658	ECEA1AS330	33 MFD 10WV Electrolytic	1	
C659	ECEA1AS330	33 MFD 10WV Electrolytic	1	
C660	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C661	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C662	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C663	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C664	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C666	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C667	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C668, C669	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	2	
C670, 671	YECQX1H102K	0.001 MFD 50WV ±10% Polyester	2	
C801	ECEA1CS101S	100 MFD 16WV Electrolytic	1	
C802	ECEA0JS221S	220 MFD 6WV Electrolytic	1	
C804	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C805	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C806	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C807	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C808	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C809	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C810	YECUV1H560JM	56 PF 50WV ±5% Chip	1	
C811	YECUV1H560JM	56 PF 50WV ±5% Chip	1	
C812	ECSF35ER47X1	0.47 MFD 35WV Tantalum	1	
C813	ECSF35ER47X1	0.47 MFD 35WV Tantalum	1	
C814	ECEA1CS101S	100 MFD 16WV Electrolytic	1	
C815	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C816	YECUV1H150JM	15 PF 50WV ±5% Chip	1	
C817	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C818	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C819	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C820	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C821	YECUV1H080DM	8 PF 50WV ±0.5 PF Chip	1	
C822	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C823	YECUV1H680JM	68 PF 50WV ±5% Chip	1	
C824	YECUV1H102KX	0.001 MFD 50WV ±10% Chip	1	
C825	YECUV1H270JM	27 PF 50WV ±5% Chip	1	
C826	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C827	YECUV1H473KX	0.047 MFD 50WV ±10% Chip	1	
C828	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C829	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C830	YECUV1H103KX	0.01 MFD 50WV ±10% Chip	1	
C831	YECUV1H472KX	0.0047 MFD 50WV ±10% Chip	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C832	ECSF35ER22X1	0.22 MFD 35WV Tantalum	1	
C833	ECEA1AS470	47 MFD 10WV Electrolytic	1	
C834	ECEA0JS470	47 MFD 6WV Electrolytic	1	
C835	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C836	ECEA1CS331S	330 MFD 16WV Electrolytic	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
		TAPE BLOCK		
C219	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C220	YECQX1H681K	680 PF 50WV ±10% Polyester	1	
C221	YECQX1H183M	0.018 MFD 50WV ±20% Polyester	1	
C222	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C223	ECEA1AS470	47 MFD 10WV Electrolytic	1	
C224	YECQX1H104M	0.1 MFD 50WV ±20% Polyester	1	
C225	ECEA1HKR33	0.33 MFD 50WV Electrolytic	1	
C226	YECQP2A471J	470 PF 100WV ±5% Polyester	1	
C227	ECEA1CK100	10 MFD 16WV Electrolytic	1	
C228	YECQX1H472J	0.0047 MFD 50WV ±5% Polyester	1	
C229	ECEA1CK100	10 MFD 16WV Electrolytic	1	
C230	YECQX1H473K	0.047 MFD 50WV ±10% Polyester	1	
C231	ECEA1CK100	10 MFD 16WV Electrolytic	1	
C232	YECQX1H562J	0.0056 MFD 50WV ±5% Polyester	1	
C233	YECQX1H273J	0.027 MFD 50WV ±5% Polyester	1	
C234	ECEA1HK010	1 MFD 50WV Electrolytic	1	
C235	ECEA1AS221	220 MFD 10WV Electrolytic	1	
C237	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C238	ECEA1CS470	47 MFD 16WV Electrolytic	1	
C240	ECEA1CS471S	470 MFD 16WV Electrolytic	1	
C241	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C242	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C243	YECKD05103Z	0.01 MFD 50WV +80, −20% Ceramic	1	
C244	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C251	YECQX1H153M	0.015 MFD 50WV ±20% Polyester	1	
C319	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C320	YECQX1H681K	680 PF 50WV ±10% Polyester	1	
C321	YECQX1H183M	0.018 MFD 50WV ±20% Polyester	1	
C322	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C323	ECEA1AS470	47 MFD 10WV Electrolytic	1	
C324	YECQX1H104M	0.1 MFD 50WV ±20% Polyester	1	
C325	ECEA1HKR33	0.33 MFD 50WV Electrolytic	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C326	YECQP2A471J	470 PF 100WV ±5% Polyester	1	
C327	ECEA1CK100	10 MFD 16WV Electrolytic	1	
C328	YECQX1H472J	0.0047 MFD 50WV ±5% Polyester	1	
C329	ECEA1CK100	10 MFD 16WV Electrolytic	1	
C330	YECQX1H473K	0.047 MFD 50WV ±10% Polyester	1	
C331	ECEA1CK100	10 MFD 16WV Electrolytic	1	
C332	YECQX1H562J	0.0056 MFD 50WV ±5% Polyester	1	
C333	YECQX1H273J	0.027 MFD 50WV ±5% Polyester	1	
C334	ECEA1HK010	1 MFD 50WV Electrolytic	1	
C335	ECEA1AS221	220 MFD 10WV Electrolytic	1	
C351	YECQX1H153M	0.015 MFD 50WV ±20% Polyester	1	

VF BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C251	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C252	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C254	YECQX1H393M	0.039 MFD 50WV ±20% Polyester	1	
C255	ECSF35ER22X1	0.22 MFD 35WV Tantalum	1	
C256	YECQX1H472K	0.0047 MFD 50WV ±10% Polyester	1	
C257	ECSF35ER22X1	0.22 MFD 35WV Tantalum	1	
C258	ECEA1CS221	220 MFD 16WV Electrolytic	1	
C259	ECEA1CS221	220 MFD 16WV Electrolytic	1	
C351	ECEA1HS010	1 MFD 50WV Electrolytic	1	
C352	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C354	YECQX1H393M	0.039 MFD 50WV ±20% Polyester	1	
C355	ECSF35ER22X1	0.22 MFD 35WV Tantalum	1	
C356	YECQX1H472K	0.0047 MFD 50WV ±10% Polyester	1	
C357	ECSF35ER22X1	0.22 MFD 35WV Tantalum	1	
C358	ECEA1AS221S	220 MFD 10WV Electrolytic	1	
C601	ECEA1CS221	220 MFD 16WV Electrolytic	1	
C602	ECSF35ER22X1	0.22 MFD 35WV Tantalum	1	
C603	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C604	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C605	ECEA1AS470	47 MFD 10WV Electrolytic	1	
C606	ECEA1AS470	47 MFD 10WV Electrolytic	1	
C607	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C608	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C609	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C610	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C611	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C612	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C613	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C614	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C615	ECEA1ES4R7	4.7 MFD 25WV Electrolytic	1	
C616	ECEA1AS470	47 MFD 10WV Electrolytic	1	
C617	ECEA1AS470	47 MFD 10WV Electrolytic	1	
C618	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C619	ECEA1AS470	47 MFD 10WV Electrolytic	1	
C620	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C621	ECEA1CS100	10 MFD 16WV Electrolytic	1	

RESISTORS

RADIO BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
R51	ERD10EJ104	100k OHM 1/8W ±5% Carbon	1	
R54	ERD10EJ563	56k OHM 1/8W ±5% Carbon	1	
R55	ERD10EJ104	100k OHM 1/8W ±5% Carbon	1	
R56	ERD10EJ104	100k OHM 1/8W ±5% Carbon	1	
R57	ERD10EJ273	27k OHM 1/8W ±5% Carbon	1	
R58	ERD10EJ473	47k OHM 1/8W ±5% Carbon	1	
R59	ERD10EJ104	100k OHM 1/8W ±5% Carbon	1	
R60	ERD10TJ820	82 OHM 1/8W ±5% Carbon	1	
R61	ERD10EJ101	100 OHM 1/8W ±5% Carbon	1	
R62	ERD10EJ102	1k OHM 1/8W ±5% Carbon	1	
R63	ERD10EJ101	100 OHM 1/8W ±5% Carbon	1	
R64	ERD10EJ104	100k OHM 1/8W ±5% Carbon	1	
R65	ERD10EJ822	8.2k OHM 1/8W ±5% Carbon	1	
R66	ERD10EJ391	390 OHM 1/8W ±5% Carbon	1	
R67	ERD10EJ104	100k OHM 1/8W ±5% Carbon	1	
R68	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R69	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R70	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R71	ERD10EJ104	100k OHM 1/8W ±5% Carbon	1	
R72	ERD10EJ471	470 OHM 1/8W ±5% Carbon	1	
R73	ERD10TJ330	33 OHM 1/8W ±5% Carbon	1	
R101	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R102	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R103	ERJ8GCJ271	270 OHM 1/8W ±5% Chip	1	
R104	ERJ8GCJ393	39k OHM 1/8W ±5% Chip	1	
R105	ERJ8GCJ683	68k OHM 1/8W ±5% Chip	1	
R106	ERJ8GCJ333	33k OHM 1/8W ±5% Chip	1	
R107	ERJ8GCJ100	10 OHM 1/8W ±5% Chip	1	
R108	ERJ8GCJ101	100 OHM 1/8W ±5% Chip	1	
R109	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R111	ERJ8GCJ224	220k OHM 1/8W ±5% Chip	1	
R113	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R114	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R115	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R116	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R117	ERJ8GCJ564	560k OHM 1/8W ±5% Chip	1	
R118	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R119	ERJ8GCJ331	330 OHM 1/8W ±5% Chip	1	
R120	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R121	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R122	ERJ8GCJ470	47 OHM 1/8W ±5% Chip	1	
R123	ERJ8GCJ221	220 OHM 1/8W ±5% Chip	1	
R124	ERJ8GCJ682	6.8k OHM 1/8W ±5% Chip	1	
R125	ERJ8GCJ152	1.5k OHM 1/8W ±5% Chip	1	
R126	ERJ8GCJ223	22k OHM 1/8W ±5% Chip	1	
R127	ERJ8GCJ272	2.7k OHM 1/8W ±5% Chip	1	
R128	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R129	ERD25FJ2R2	2.2 OHM 1/4W ±5% Carbon	1	
R130	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R131	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R132	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R133	ERJ8GCJ331	330 OHM 1/8W ±5% Chip	1	
R135	ERJ8GCJ153	15k OHM 1/8W ±5% Chip	1	
R136	ERJ8GCJ153	15k OHM 1/8W ±5% Chip	1	
R137	ERJ8GCJ224	220k OHM 1/8W ±5% Chip	1	
R138	ERJ8GCJ822	8.2k OHM 1/8W ±5% Chip	1	
R140	ERJ8GCJ101	100 OHM 1/8W ±5% Chip	1	
R141	ERJ8GCJ681	680 OHM 1/8W ±5% Chip	1	
R142	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R149	ERJ8GCJ272	2.7k OHM 1/8W ±5% Chip	1	
R150	ERJ8GCJ331	330 OHM 1/8W ±5% Chip	1	
R152	ERJ8GCJ331	330 OHM 1/8W ±5% Chip	1	
R153	ERJ8GCJ391	390 OHM 1/8W ±5% Chip	1	
R154	ERJ8GCJ101	100 OHM 1/8W ±5% Chip	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
R155	ERJ8GCJ272	2.7k OHM 1/8W ±5% Chip	1	
R156	ERD10TJ153	15k OHM 1/8W ±5% Carbon	1	
R159	ERJ8GCJ333	33k OHM 1/8W ±5% Chip	1	
R160	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R161	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R162	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R163	ERJ8GCJ391	390 OHM 1/8W ±5% Chip	1	
R164	ERJ8GCJ272	2.7k OHM 1/8W ±5% Chip	1	
R165	ERJ8GCJ392	3.9k OHM 1/8W ±5% Chip	1	
R166	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R167	ERJ8GCJ123	12k OHM 1/8W ±5% Chip	1	
R168	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R169	ERG1ANJ680	68 OHM 1W ±5% Metal Film	1	
R170	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R171	ERJ8GCJ152	1.5k OHM 1/8W ±5% Chip	1	
R172	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R173	ERJ8GCJ221	220 OHM 1/8W ±5% Chip	1	
R174	ERJ8GCJ221	220 OHM 1/8W ±5% Chip	1	
R175	ERJ8GCJ564	560k OHM 1/8W ±5% Chip	1	
R176	ERJ8GCJ331	330 OHM 1/8W ±5% Chip	1	
R179	ERJ8GCJ221	220 OHM 1/8W ±5% Chip	1	
R180	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R181	ERJ8GCJ151	150 OHM 1/8W ±5% Chip	1	
R182	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R360	ERJ8GCJ100	10 OHM 1/8W ±5% Chip	1	
R500	ERJ8GCJ474	470k OHM 1/8W ±5% Chip	1	
R501	ERJ8GCJ222	2.2k OHM 1/8W ±5% Chip	1	
R502	ERJ8GCJ222	2.2k OHM 1/8W ±5% Chip	1	
R503	ERJ8GCJ272	2.7k OHM 1/8W ±5% Chip	1	
R504	ERJ8GCJ223	22k OHM 1/8W ±5% Chip	1	
R505	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R506	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R507	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R508	ERJ8GCJ682	6.8k OHM 1/8W ±5% Chip	1	
R509	ERJ8GCJ121	120 OHM 1/8W ±5% Chip	1	
R510	ERJ8GCJ151	150 OHM 1/8W ±5% Chip	1	
R511	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R512	ERJ8GCJ683	68k OHM 1/8W ±5% Chip	1	
R513	ERD25VJ223	22k OHM 1/4W ±5% Carbon	1	
R551	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R552	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R553	ERJ8GCJ153	15k OHM 1/8W ±5% Chip	1	
R554	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R555	ERJ8GCJ222	2.2k OHM 1/8W ±5% Chip	1	
R556	ERJ8GCJ222	2.2k OHM 1/8W ±5% Chip	1	
R557	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R558	ERJ8GCJ153	15k OHM 1/8W ±5% Chip	1	
R563	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R564	ERJ8GCJ392	3.9k OHM 1/8W ±5% Chip	1	
R565	ERJ8GCJ333	33k OHM 1/8W ±5% Chip	1	
R566	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R651	ERJ8GCJ122	1.2k OHM 1/8W ±5% Chip	1	
R652	ERJ8GCJ152	1.5k OHM 1/8W ±5% Chip	1	
R653	ERJ8GCJ122	1.2k OHM 1/8W ±5% Chip	1	
R654	ERJ8GCJ152	1.5k OHM 1/8W ±5% Chip	1	
R655	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R656	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R657	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R658	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R659	ERJ8GCJ331	330 OHM 1/8W ±5% Chip	1	
R660	ERJ8GCJ222	2.2k OHM 1/8W ±5% Chip	1	
R661	ERJ8GCJ222	2.2k OHM 1/8W ±5% Chip	1	
R662	ERJ8GCJ331	330 OHM 1/8W ±5% Chip	1	
R663	ERJ8GCJ331	330 OHM 1/8W ±5% Chip	1	
R664	ERG1ANJ560	56 OHM 1W ±5% Metal Film	1	
R665	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R666	ERD25FJ1R0	1 OHM 1/4W ±5% Carbon	1	
R667	ERG1ANJ181	180 OHM 1W ±5% Metal Film	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
R329	ERD25VJ274	270k OHM 1/4W ±5% Carbon	1	
R330	ERD25VJ184	180k OHM 1/4W ±5% Carbon	1	
R331	ERD25VJ473	47k OHM 1/4W ±5% Carbon	1	
R332	ERD25VJ332	3.3k OHM 1/4W ±5% Carbon	1	
R333	ERD25VJ181	180 OHM 1/4W ±5% Carbon	1	
R334	ERD25VJ392	3.9k OHM 1/4W ±5% Carbon	1	
R335	ERD25VJ392	3.9k OHM 1/4W ±5% Carbon	1	
R340	ERD25VJ124	120k OHM 1/4W ±5% Carbon	1	
R361	ERD25TJ153	15k OHM 1/4W ±5% Carbon	1	
R362	ERD25VJ124	120k OHM 1/4W ±5% Carbon	1	
R363	ERD25VJ104	100k OHM 1/4W ±5% Carbon	1	

VF BLOCK

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
R251	ERD25VJ274	270k OHM 1/4W ±5% Carbon	1	
R252	ERD25VJ102	1k OHM 1/4W ±5% Carbon	1	
R253	ERD25VJ472	4.7k OHM 1/4W ±5% Carbon	1	
R255	ERD25VJ103	10k OHM 1/4W ±5% Carbon	1	
R256	ERD25VJ272	2.7k OHM 1/4W ±5% Carbon	1	
R257	ERD25VJ272	2.7k OHM 1/4W ±5% Carbon	1	
R258	ERD25VJ153	15k OHM 1/4W ±5% Carbon	1	
R259	ERD25VJ105	1M OHM 1/4W ±5% Carbon	1	
R260	ERD25VJ221	220 OHM 1/4W ±5% Carbon	1	
R261	ERD25VJ221	220 OHM 1/4W ±5% Carbon	1	
R351	ERD25VJ274	270k OHM 1/4W ±5% Carbon	1	
R352	ERD25VJ102	1k OHM 1/4W ±5% Carbon	1	
R353	ERD25VJ472	4.7k OHM 1/4W ±5% Carbon	1	
R355	ERD25VJ103	10k OHM 1/4W ±5% Carbon	1	
R356	ERD25VJ272	2.7k OHM 1/4W ±5% Carbon	1	
R357	ERD25VJ272	2.7k OHM 1/4W ±5% Carbon	1	
R358	ERD25VJ153	15k OHM 1/4W ±5% Carbon	1	
R359	ERD25VJ105	1M OHM 1/4W ±5% Carbon	1	
R361	ERD25VJ102	1k OHM 1/4W ±5% Carbon	1	
R601	ERD25VJ103	10k OHM 1/4W ±5% Carbon	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
R602	ERD25VJ473	47k OHM 1/4W ±5% Carbon	1	
R603	ERD25VJ103	10k OHM 1/4W ±5% Carbon	1	
R604	ERD25VJ682	6.8k OHM 1/4W ±5% Carbon	1	
R605	ERD25FJ560	56 OHM 1/4W ±5% Carbon	1	
R606	ERD25VJ103	10k OHM 1/4W ±5% Carbon	1	
R607	ERD25VJ562	5.6k OHM 1/4W ±5% Carbon	1	
R608	ERD25VJ123	12k OHM 1/4W ±5% Carbon	1	
R609	ERD25VJ393	39k OHM 1/4W ±5% Carbon	1	
R610	ERD25VJ224	220k OHM 1/4W ±5% Carbon	1	
R611	ERD25VJ564	560k OHM 1/4W ±5% Carbon	1	
R612	ERD25VJ474	470k OHM 1/4W ±5% Carbon	1	
R613	ERD25VJ334	330k OHM 1/4W ±5% Carbon	1	
R614	ERD25VJ473	47k OHM 1/4W ±5% Carbon	1	
R615	ERD25VJ153	15k OHM 1/4W ±5% Carbon	1	
R616	ERD25VJ332	3.3k OHM 1/4W ±5% Carbon	1	
R617	ERD25VJ102	1k OHM 1/4W ±5% Carbon	1	
R618	ERD25VJ473	47k OHM 1/4W ±5% Carbon	1	
R619	ERD25VJ151	150 OHM 1/4W ±5% Carbon	1	
R620	ERD25VJ471	470 OHM 1/4W ±5% Carbon	1	
R621	ERD25VJ222	2.2k OHM 1/4W ±5% Carbon	1	
R622	ERD25VJ471	470 OHM 1/4W ±5% Carbon	1	
R623	ERD25VJ683	68k OHM 1/4W ±5% Carbon	1	
R624	ERD25VJ222	2.2k OHM 1/4W ±5% Carbon	1	
R625	ERD25VJ560	56 OHM 1/4W ±5% Carbon	1	
R626	ERD25VJ221	220 OHM 1/4W ±5% Carbon	1	
R627	ERD25VJ332	3.3k OHM 1/4W ±5% Carbon	1	
R628	ERD25VJ103	10k OHM 1/4W ±5% Carbon	1	
R629	ERD25VJ331	330 OHM 1/4W ±5% Carbon	1	
R630	ERD25VJ101	100 OHM 1/4W ±5% Carbon	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
R890	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R891	ERJ8GCJ123	12k OHM 1/8W ±5% Chip	1	
R892	ERJ8GCJ223	22k OHM 1/8W ±5% Chip	1	
R893	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R894	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R895	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R896	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R897	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R898	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R899	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R900	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R901	ERJ8GCJ391	390 OHM 1/8W ±5% Chip	1	
R902	ERJ8GCJ101	100 OHM 1/8W ±5% Chip	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
		TAPE BLOCK		
R222	ERD25VJ393	39k OHM 1/4W ±5% Carbon	1	
R223	ERD25VJ560	56 OHM 1/4W ±5% Carbon	1	
R224	ERD25VJ682	6.8k OHM 1/4W ±5% Carbon	1	
R225	ERD25VJ184	180k OHM 1/4W ±5% Carbon	1	
R226	ERD25VJ332	3.3k OHM 1/4W ±5% Carbon	1	
R227	ERD25VJ472	4.7k OHM 1/4W ±5% Carbon	1	
R228	ERD25VJ102	1k OHM 1/4W ±5% Carbon	1	
R229	ERD25VJ274	270k OHM 1/4W ±5% Carbon	1	
R230	ERD25VJ184	180k OHM 1/4W ±5% Carbon	1	
R231	ERD25VJ473	47k OHM 1/4W ±5% Carbon	1	
R232	ERD25VJ332	3.3k OHM 1/4W ±5% Carbon	1	
R233	ERD25VJ181	180 OHM 1/4W ±5% Carbon	1	
R234	ERD25VJ392	3.9k OHM 1/4W ±5% Carbon	1	
R235	ERD25VJ392	3.9k OHM 1/4W ±5% Carbon	1	
R236	ERD25VJ102	1k OHM 1/4W ±5% Carbon	1	
R238	ERD25VJ221	220 OHM 1/4W ±5% Carbon	1	
R239	ERX1ANJ1R5	1.5 OHM 1W ±5% Metal Film	1	
R241	ERD25VJ683	68k OHM 1/4W ±5% Carbon	1	
R242	ERD25VJ124	120k OHM 1/4W ±5% Carbon	1	
R243	ERD25VJ103	10k OHM 1/4W ±5% Carbon	1	
R244	ERD25VJ224	220k OHM 1/4W ±5% Carbon	1	
R261	ERD25TJ153	15k OHM 1/4W ±5% Carbon	1	
R262	ERD25VJ124	120k OHM 1/4W ±5% Carbon	1	
R263	ERD25VJ104	100k OHM 1/4W ±5% Carbon	1	
R322	ERD25VJ393	39k OHM 1/4W ±5% Carbon	1	
R323	ERD25VJ560	56 OHM 1/4W ±5% Carbon	1	
R324	ERD25VJ682	6.8k OHM 1/4W ±5% Carbon	1	
R325	ERD25VJ184	180 OHM 1/4W ±5% Carbon	1	
R326	ERD25VJ332	3.3k OHM 1/4W ±5% Carbon	1	
R327	ERD25VJ472	4.7k OHM 1/4W ±5% Carbon	1	
R328	ERD25VJ102	1k OHM 1/4W ±5% Carbon	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
R800	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R801	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R802	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R806	ERJ8GCJ224	220k OHM 1/8W ±5% Chip	1	
R807	ERJ8GCJ224	220k OHM 1/8W ±5% Chip	1	
R810	ERJ8GCJ223	22k OHM 1/8W ±5% Chip	1	
R811	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R813	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R814	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R815	ERJ8GCJ223	22k OHM 1/8W ±5% Chip	1	
R816	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R817	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R818	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R819	ERG1ANJ560	56 OHM 1W ±5% Metal Film	1	
R820	ERD25TJ270	27 OHM 1/4W ±5% Carbon	1	
R821	ERD25TJ270	27 OHM 1/4W ±5% Carbon	1	
R822	ERD25TJ270	27 OHM 1/4W ±5% Carbon	1	
R823	ERD25TJ270	27 OHM 1/4W ±5% Carbon	1	
R824	ERD25TJ270	27 OHM 1/4W ±5% Carbon	1	
R825	ERD25TJ270	27 OHM 1/4W ±5% Carbon	1	
R826	ERD25TJ270	27 OHM 1/4W ±5% Carbon	1	
R827	ERD25TJ270	27 OHM 1/4W ±5% Carbon	1	
R828	ERD25TJ270	27 OHM 1/4W ±5% Carbon	1	
R845	ERJ8GCJ471	470 OHM 1/8W ±5% Chip	1	
R846	ERJ8GCJ222	2.2k OHM 1/8W ±5% Chip	1	
R847	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R848	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R849	ERJ8GCJ152	1.5k OHM 1/8W ±5% Chip	1	
R850	ERJ8GCJ471	470 OHM 1/8W ±5% Chip	1	
R851	ERJ8GCJ391	390 OHM 1/8W ±5% Chip	1	
R852	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R853	ERG1ANJ181	180 OHM 1W ±5% Metal Film	1	
R854	ERD12FJ151	150 OHM 1/2W ±5% Carbon	1	
R855	ERJ8GCJ474	470k OHM 1/8W ±5% Chip	1	
R856	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R857	ERJ8GCJ561	560 OHM 1/8W ±5% Chip	1	
R858	ERJ8GCJ683	68k OHM 1/8W ±5% Chip	1	
R859	ERJ8GCJ104	100k OHM 1/8W ±5% Chip	1	
R860	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R861	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R862	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R863	ERJ8GCJ563	56k OHM 1/8W ±5% Chip	1	
R864	ERJ8GCJ102	1k OHM 1/8W ±5% Chip	1	
R865	ERJ8GCJ221	220 OHM 1/8W ±5% Chip	1	
R866	ERJ8GCJ224	220k OHM 1/8W ±5% Chip	1	
R867	ERJ8GCJ334	330k OHM 1/8W ±5% Chip	1	
R868	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R869	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R870	ERJ8GCJ221	220 OHM 1/8W ±5% Chip	1	
R871	ERJ8GCJ471	470 OHM 1/8W ±5% Chip	1	
R872	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R873	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R874	ERJ8GCJ394	390k OHM 1/8W ±5% Chip	1	
R875	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R876	ERJ8GCJ151	150 OHM 1/8W ±5% Chip	1	
R877	ERJ8GCJ332	3.3k OHM 1/8W ±5% Chip	1	
R878	ERJ8GCJ391	390 OHM 1/8W ±5% Chip	1	
R879	ERJ8GCJ122	1.2k OHM 1/8W ±5% Chip	1	
R880	ERJ8GCJ103	10k OHM 1/8W ±5% Chip	1	
R881	ERJ8GCJ823	82k OHM 1/8W ±5% Chip	1	
R882	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	
R883	ERJ8GCJ331	330 OHM 1/8W ±5% Chip	1	
R884	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R885	ERJ8GCJ154	150k OHM 1/8W ±5% Chip	1	
R886	ERJ8GCJ154	150k OHM 1/8W ±5% Chip	1	
R887	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R888	ERJ8GCJ473	47k OHM 1/8W ±5% Chip	1	
R889	ERJ8GCJ472	4.7k OHM 1/8W ±5% Chip	1	

VARIABLE CAPACITORS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C54	ECV1ZW10X53N	10 PF Trimmer	1	
C62, 69	ECV1ZW06X53N	6 PF Trimmer	2	
C109,121,126	ECV1ZW20X53N	20 PF Trimmer	3	
C111, 128	ECV1ZW40X53N	40 PF Trimmer	2	
C117	YECTTC8RT900	90 PF Trimmer	1	

VARIABLE RESISTORS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
VR150	EVNB3AA00B53	5k OHM (B) Semi-fixed	1	
VR152, 552	EVNA1AA00B53	5k OHM (B) Semi-fixed	2	
VR153	EVNB3AA00B54	50k OHM (B) Semi-fixed	1	
VR201, 301	EVNB1AA00B14	10k OHM (B) Semi-fixed	2	
VR251, 252	EVK7GBS031E7	50k OHM Tone Control	1	
253, 351		20k OHM Balance Control		
353		100k OHM Volume Control		
w/SW701		w/Power Switch		
VR551	EVNA1AA00B14	10k OHM (B) Semi-fixed	1	
VR553	EVNK4AA00B54	50k OHM (B) Semi-fixed	1	
VR601	EVNA1AA00B53	5k OHM (B) Semi-fifed	1	

SWITCHES

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
SW151 w/810	YEAS07113	Band Selector Switch w/Search	1	
SW801 ~ 809	YEAS09155	M1 ~ 5, ME, D, m, h	9	
SW102, 201 202, 203	YEAS09136	Dolby NR, DX/LOC, Metal/CrO₂, Loudness	4	

COILS, TRANSFORMERS AND CERAMIC FILTERS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
L52	YELA08N080	FM Ant Coil	1	
L53	YELT08N075	FM RF Coil	1	
L54	YELL08N103	FM OSC Coil	1	
L55	YELT04C330K	FM RF Coil	1	
L101	YELA07S081	AM Ant Coil	1	
L102	YELA07S082	AM Ant Coil	1	
L103	YELL07S104	AM OSC Coil	1	
L104	YELL07N089	AM OSC Coil	1	
L105	YELT07S077	AM RF Coil	1	
L106	YELT07S076	AM RF Coil	1	
L107	YELT05N330K	AM RF Coil	1	
L108	YELQ07S046	AM RF Coil	1	
L150	ELQS270KB	FM RF Coil	1	
L151	YELM10R928	FM MPX Coil	1	
L500	ELM7Q204A	FM MPX Coil	1	
L801	YELT04C102K	MPX Coil	1	
IFT51	YEIF07S7049	FM IFT	1	
IFT101	YEIA07S7110	AM IFT	1	
IFT102	YEIA07S7111	AM IFT	1	
IFT150	EIF7E003D	FM IFT	1	
IFT500	ELM7Q004A	FM IFT	1	
IFT801	EIA7Q201B	AM IFT	1	
CF51	YEIN09N5010	Ceramic Filter	1	
CF101	YEIN07N5026	Ceramic Filter	1	
CF150, 151	YEIN09N5016	Ceramic Filter	2	
CF801	YEIN07N5018	Ceramic Filter	1	

COMPONENT COMBINATIONS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
Z500	EXBS84472K	4.7k OHM x 4	1	
Z551	EXF3SM04	180 PF x 3	1	

CRYSTALS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
X801	YEXL43U04500	4.5 MHz	1	
X802	YEXL43U11520	11.52 MHz	1	

CY-K931EN (FOOT SWITCH)

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
	YEAS05003A	Switch	1	
	XTB5 + 16AFX	⊕ Screw, Taptite 5mmø x 16mm	2	
	XWA5BFX	Washer, Spring 5mmø	2	
	XWG5FX	Washer, Flat 5mmø	2	

ACCESSORIES

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
A101	YAFG04008	Supporting Strap	1	
A102	YEP9BS571	Mounting Screw Kit	1	
A102-1	(YEJW02008AW)	(Washer, Flat)	(4)	
A102-2	(YEJN1042)	(Nut, Hexagon)	(4)	
A102-3	(XNG5AFX)	(Nut, Hexagon)	(2)	
A102-4	(XWG5FX)	(Washer, Flat)	(2)	
A102-5	(XWA5BFX)	(Washer, Spring)	(2)	
A102-6	(XVG5C25FXS)	(Bolt, Hexagon)	(1)	
A102-7	(XWC5CFX)	(Washer, Toothed)	(1)	
A103	YEP9BS683	Mounting Screw Kit	1	
A103-1	(XTB4 + 12BFX)	(⊕ Screw, Taptite 4mmø x 12mm)	(2)	
A103-2	(XWG4FX)	(Washer, Flat)	(2)	
A103-3	(XWA4BFX)	(Washer, Spring)	(2)	
A104	YEFC05237	Trim Plate	1	
A105	YEFC05190A	Trim Plate	1	
A106	YEFE07137	Knob , SW, VOL, BAL, TUN, SEEK	2	
A107	YEFE08142	Knob , Tone, Band Selector	2	

PRINTING

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
A108	YEFM28135	Instruction Book	1	

POWER AMPLIFIER

MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
⚠ F (1-B)	XBB1C50NS1	Fuse 5 A	1	
DIN (2-A)	YEAE01232A	Connector	1	
M301 (1-B)	YEFA01518	Chassis	1	
M302 (2-B)	YEFA03458	Upper Cover	1	
M303 (2-A)	YEFF01272	Heat Sink	1	
M304 (2-B)	YEFF01273	Heat Sink	1	
M305 (1-A)	YEFG011004	Front Bracket	1	
M306 (1-A)	YEFX007196	Cord Clamper	1	
M307 (1-B)	YEFX007096	Cord Clamper	1	
M308 (1-B)	YEAJ01456	Power Supply Cord	1	
M309 (1-B)	YEAJ01455	Power Supply Cord	1	
M310 (1-B)	YBAJ01029	Wire, Ground	1	
M311 (2-A) (2-B)	YEFX021880	Mounting Bracket	2	
M312 (1-B)	YEAJ04340	Speaker Cord , Right	1	
M313 (1-B)	YEAJ04341	Speaker Cord , Left	1	
M314	YEJT03007	⊕ Screw	3	
M315 (2-A) (2-B)	YEJT03008	⊕ Screw	4	
M316	XTB3 + 6JFXS	⊕ Screw, Taptite 3mmø x 6mm	6	
M317	XYN5 + F8FXS	⊕ Screw, Taptite 5mmø x 8mm	2	

ICs AND TRANSISTOR

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
IC201, 301	YEAMHA1388	Power Amp	2	
Q701	2SC1684	Switching	1	

DIODES

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
D701, 702	YEAD030	IC Protection, Speaker Suppression	2	

CAPACITORS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C202	YECQX1H152K	0.0015 MFD 50WV ±10% Polyester	1	
C203	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C204	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C205	ECEA1CS470	47 MFD 16WV Electrolytic	1	
C206	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C207	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C208	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C209	ECQV05104JZ	0.1 MFD 50WV ±5% Polystyrene	1	
C210	ECQV05104JZ	0.1 MFD 50WV ±5% Polystyrene	1	
C211	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C302	YECQX1H152K	0.0015 MFD 50WV ±10% Polyester	1	
C303	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C304	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C305	ECEA1CS470	47 MFD 16WV Electrolytic	1	
C306	ECEA0JS101	100 MFD 6WV Electrolytic	1	
C307	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C308	ECEA1AS101	100 MFD 10WV Electrolytic	1	
C309	ECQV05104JZ	0.1 MFD 50WV ±5% Polystyrene	1	
C310	ECQV05104JZ	0.1 MFD 50WV ±5% Polystyrene	1	

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
C311	ECEA1CS100	10 MFD 16WV Electrolytic	1	
C701	ECEA1CS222SZ	2200 MFD 16WV Electrolytic	1	
C702	ECEA1CS222SZ	2200 MFD 16WV Electrolytic	1	
C703	ECEA1CS101	100 MFD 16WV Electrolytic	1	
CS201, 202 301, 302	YECCL510417	Feedthrough	1	

RESISTORS

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
R201	ERD25VJ103	10k OHM 1/4W ±5% Carbon	1	
R202	ERD25VJ222	2.2k OHM 1/4W ±5% Carbon	1	
R203	ERD25VJ121	120 OHM 1/4W ±5% Carbon	1	
R204	ERD25VJ121	120 OHM 1/4W ±5% Carbon	1	
R205	ERD25VJ2R2	2.2 OHM 1/4W ±5% Carbon	1	
R206	ERD25VJ2R2	2.2 OHM 1/4W ±5% Carbon	1	
R301	ERD25VJ103	10k OHM 1/4W ±5% Carbon	1	
R302	ERD25VJ222	2.2k OHM 1/4W ±5% Carbon	1	
R303	ERD25VJ121	120 OHM 1/4W ±5% Carbon	1	
R304	ERD25VJ121	120 OHM 1/4W ±5% Carbon	1	
R305	ERD25VJ2R2	2.2 OHM 1/4W ±5% Carbon	1	
R306	ERD25VJ2R2	2.2 OHM 1/4W ±5% Carbon	1	
R701	ERD25VJ223	22k OHM 1/4W ±5% Carbon	1	
R702	ERD25VJ332	3.3k OHM 1/4W ±5% Carbon	1	

COMPONENT COMBINATION

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
Z701	YECCL55B222M	Capacitor Block	1	

COIL

Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
L701	YETQ026F048A	Choke Coil	1	

RELAY

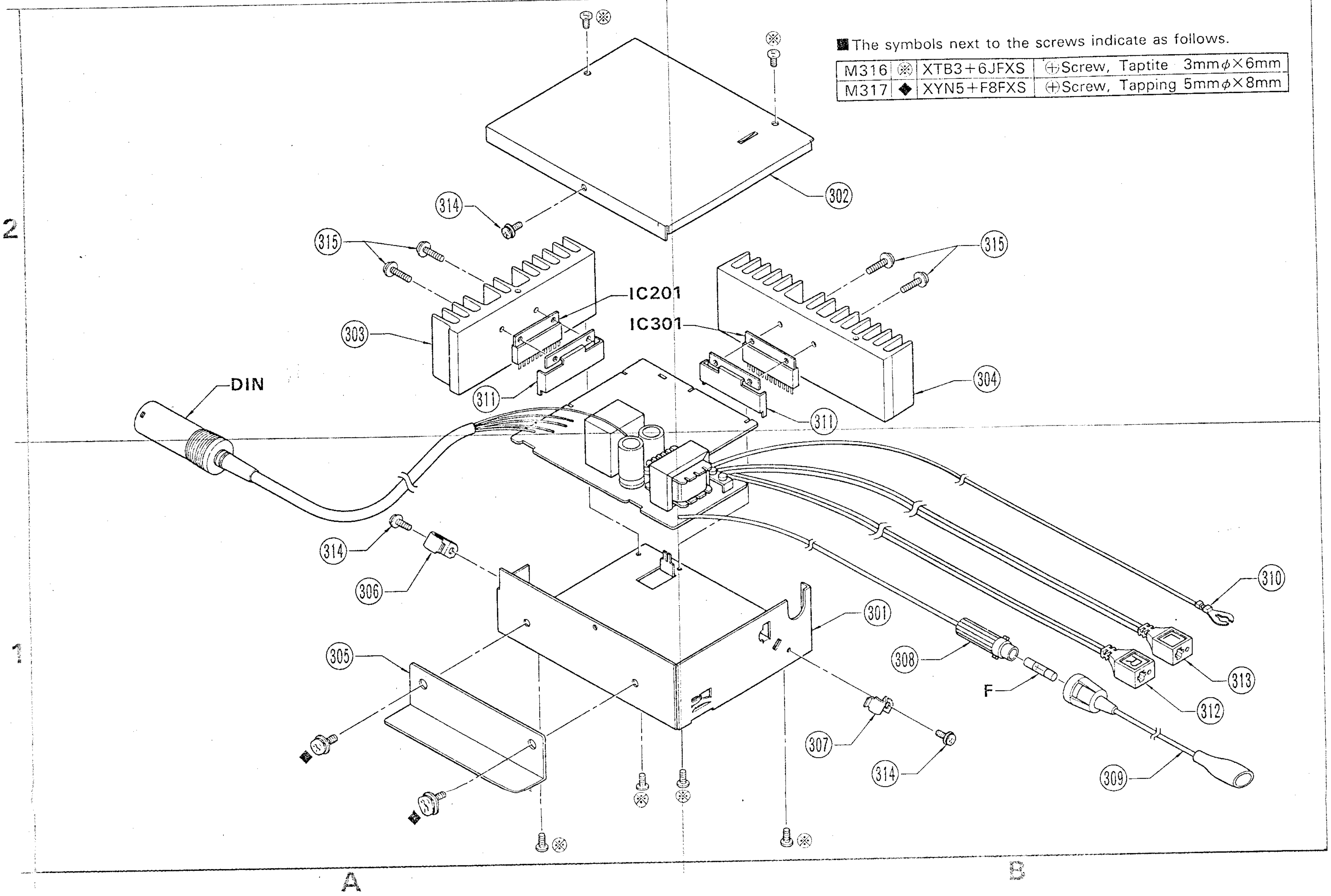
Ref. No.	Part No.	Part Name & Description	Pcs Set	Remarks
RY701	YEAS15018	Relay	1	

EXPLODED VIEW(POWER AMP)/AUFGELÖSTE DARSTELLUNG(LEISTUNGSVERSTÄRKER)

- Numbers in ○ are indicated REF. NO. in the REPLACEMENT PARTS LIST.

■ The symbols next to the screws indicate as follows.

M316	※	XTB3+6JFXS	⊕Screw, Taptite 3mmφ×6mm
M317	◆	XYN5+F8FXS	⊕Screw, Tapping 5mmφ×8mm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